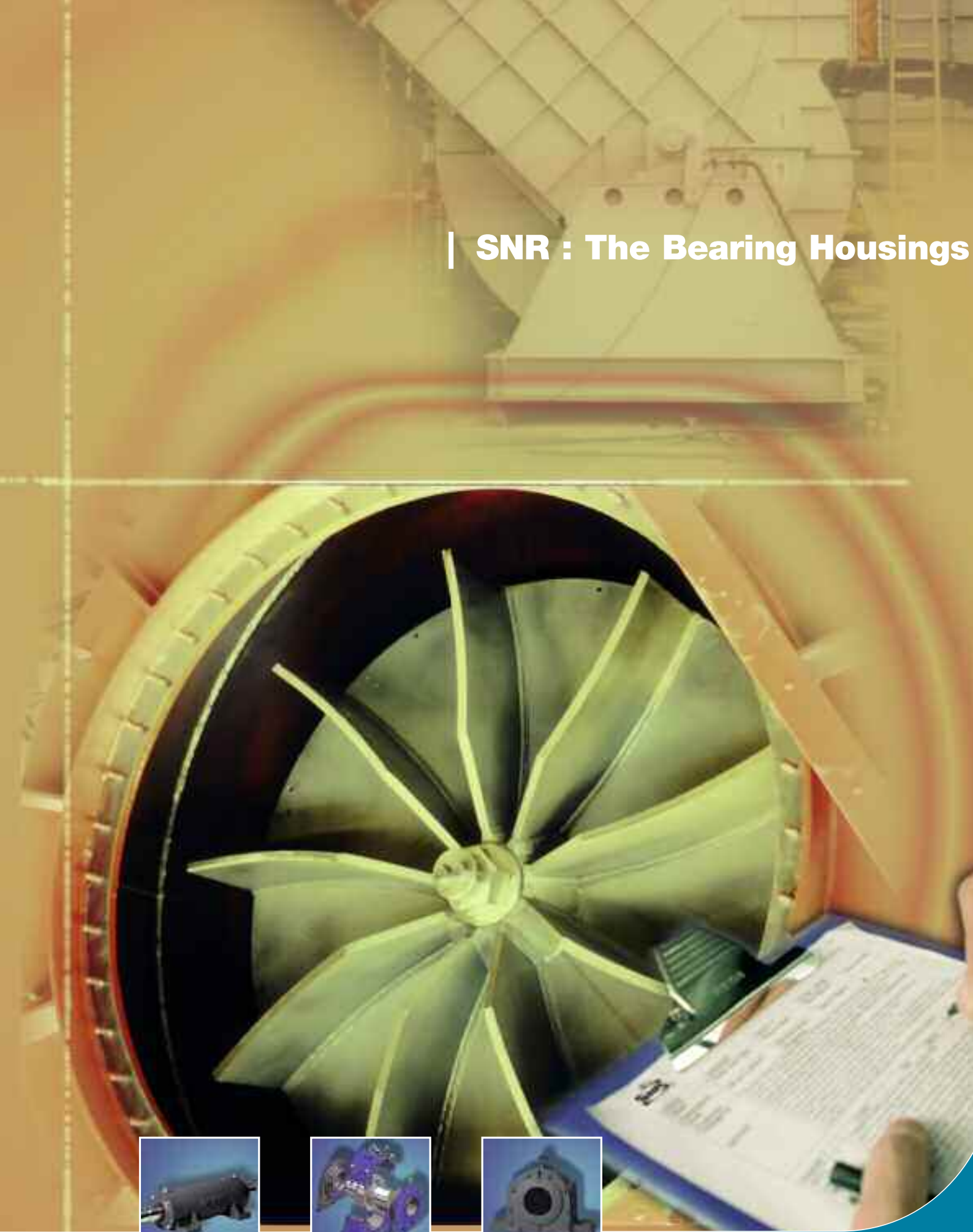


# | SNR : The Bearing Housings



**Industry**





# Contents

|   | Page      |  | Page      |
|---|-----------|--|-----------|
| <b>Bearing Housings And Mounting Accessories</b>        | <b>2</b>  | <b>Flange Bearing Housings 722500</b>        | <b>25</b> |
| Housings  | 3         | Design                                       | 25        |
| Bearings  | 4         | Sealing Systems And Lubrication              | 25        |
| Sealing Systems   | 6         |  |           |
| Lubrication   | 8         | <b>Flange Bearing Housings F 11200</b>       | <b>26</b> |
| Bearing Clearance                                       | 10        |  |           |
| Mounting Tools  | 12        | <b>Plummer Block Housings SD 3100 TS</b>     | <b>27</b> |
| Bearing Arrangement                                     | 13        | Designs                                      | 27        |
|   |           | Sealing system                               | 27        |
| <b>Plummer Block Housings With Oil Lubrication SNOE</b> | <b>14</b> | Lubrication                                  | 27        |
| Designs   | 14        | Miscellaneous                                | 27        |
| Sealing Systems   | 15        |  |           |
| Lubrication   | 15        | <b>Dimension Tables</b>                      |           |
| Miscellaneous   | 15        | SNOE 200 Plummer Block Housings              | 28-29     |
|   |           | SNOE 300 Plummer Block Housings              | 30-31     |
| <b>Mine Car Bearing Housings TVN</b>                    | <b>16</b> | TVN 200 Mine Car Bearing Housings            | 32-33     |
| TVN Standard Design                                     | 16        | TVN 300 Mine Car Bearing Housings            | 34-35     |
| TVN Housing For High Temperature Applications           | 16        | TVN 6200/6300 Hardening Car Bearing Housings | 36-37     |
|   |           | TN 200/300 Plummer Block Housings            | 38-39     |
| <b>Plummer Block Housings TN</b>                        | <b>17</b> | ZLG 300 Double Bearing Housings              | 40-43     |
|   |           | DLG 300 Triple Bearing Housings              | 44-45     |
| <b>Double And Triple Bearing Housings ZLG/DLG</b>       | <b>18</b> | ZLOE 200/300 Double Bearing Housings         | 46-47     |
| Designs   | 18        | 722500 Flange Bearing Housings               | 48-51     |
| Load  | 21        | F 11200 Flange Bearing Housings              | 52-53     |
| Lubrication   | 21        | SD 3100 TS Plummer Block Housings            | 54-57     |
| Sealing System  | 22        |  |           |
| Miscellaneous   | 22        | <b>Special Solutions</b>                     | <b>58</b> |
|   |           | Auxiliary Programme                          | 59        |
| <b>Oil Lubricated Double Bearing Housings ZLOE</b>      | <b>23</b> |  |           |
| Designs   | 23        |  |           |
| Lubrication   | 23        |  |           |
| Sealing System  | 24        |  |           |
| Miscellaneous   | 24        |  |           |

## Special note:

Information about our **two-part bearing housings SNC** could be found in the catalogue "The SNC Pillow Block Range For Your Application".

Further on, our catalogue "SNOL Innovation in Performance and Economy" will inform you about the two-part bearing housings SNOL with oil lubrication, which can be sent on request.



## SNR – Bearing Housings

SNR bearing housings are made for all applications where high performance is needed.

SNR offers a wide range of different bearing housings. All offered types are the best choice regarding design, quality and life time.

SNR bearing housings are optimized to fulfil the requirements especially in the following fields of application:

- Ventilator Industry
- Conveyor Systems
- Escalators
- Textile machines
- Mining.....

Especially for the demand in the ventilator industry we extended our range of oil lubricated double bearing housings (ZLOE) with several new models.

All plummer block housings (grease and oil lubricated) are also obtainable fully assembled with shaft.

Our strengths are particularly geared towards the design and production of special housings. In this area too, we have also developed new solutions in close cooperation with our customers.

Our different production options enable us to produce small and bulk volumes at top quality, quickly and inexpensively.

Our customers have been opting for our SNR products for years because the following points are of importance to them:

- All products from a single source
- High quality standard
- Functional details
- High efficiency
- Maintenance and repairs are easy to do and can be done by our customers

The bearing housing design undergoes constant further development. For this reason we reserve the right to introduce at any given time technical modifications to our products which serve to enhance the technical capability.

# Bearing Housings and Mounting accessories

A bearing housing is a module which contains the following components:

- a housing made of cast iron or special materials, 2-part or compact, that can be screwed onto the mounting surface with bolts;
- one or several bearings, which is/are mounted either directly onto the shaft or which is/are attached with the aid of an adapter sleeve;
- a sealing system to protect the bearings in service;
- a device for re-lubrication of the bearings under running conditions.

## Housings

### Housing design

The bearing housing design is available in two basic versions:

- as a 2-part bearing housing with an integrated self-aligning or spherical-roller bearing;
- as a compact unit with an integrated self-aligning or spherical-roller bearing, but also with a bearings or a combination of several other bearings.

Along with this fundamental classification, the SNR bearing housings are also differentiated in terms of plummer block housings, suspended housing, double or triple bearing housings and flange bearing housings.

### Material

The housings are made of grey cast iron as standard. For special applications spheroidal cast iron or cast steel in various qualities are also available. Similarly, various steel materials as well as other application-specific materials can be used.

For special requirements it is also possible to coat the housing surfaces. In such cases please ask us for specific delivery options.

### Painting

All SNR bearing housings are painted in blue (RAL 7031 and RAL 5010 for series SD). All externally-located surfaces are painted, i.e. including the underside and - in part - the housing's bolting surface.

Special paintings are also available on request.

The bearing seat and all other internally-located surfaces are preserved. For oil lubricated bearing housings the housing's free interior surfaces are painted.

### Bearing seat

The bearing seat fittings in the individual housings are geared towards each individual application. Basically however, it is always selected such that axial displacement of the bearing outer race in a floating bearing is possible.

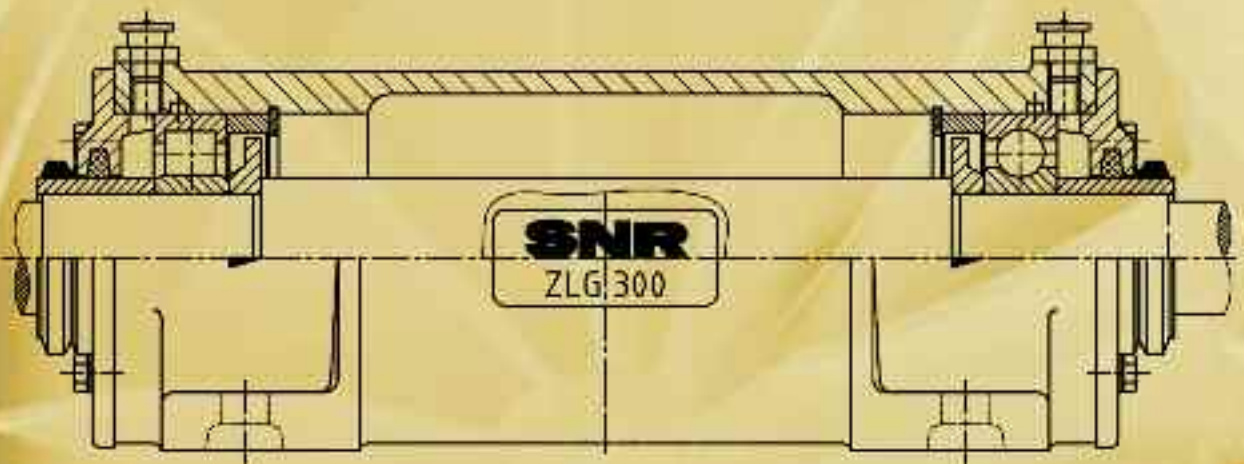
# Bearings

## Bearings with cylindrical bores

Bearings with cylindrical bores are mounted directly onto the shaft. A shaft fit is to be selected that matches the application and bearings used. The bearing itself must however be firmly mounted onto the shaft. An SNR induction heating device should be used (see annex p. 59) to mount the bearing.

Cylindrical bearings require a shaft shoulder as a contact surface within the housing. This in turn means that the diameter of the inlet or outlet bore in the housing generally deviates from the diameter of the bearing used.

The figure below shows a double bearing housing ZLG 300.

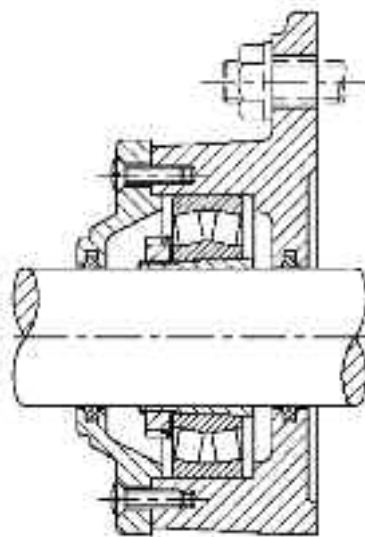


### Bearing with tapered bore

Bearings with a tapered bore are mounted onto the shaft with the aid of an adapter sleeve. Here the tolerance of the shaft may be higher than for bearings with a cylindrical bore. Fundamentally, bright-drawn shafts may be used (fit h7 - h9).

The bearing ring is fastened onto the sleeve by clamping it axially. In doing so the radial bearing clearance after mounting must be adhered to (see SNR mounting card p. 11).

The figure below shows a flange bearing housing.



### Bearing clearance

Bearings with tapered bores are made with a greater radial clearance than normal as standard. The designation for this is, for example: 22316 K C3

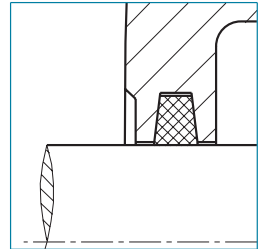
|       |  |
|-------|--|
| 22316 | Spherical roller bearing from 22300 series |
| K     | Tapered bore                               |
| C3    | bearing clearance                          |

Bearings with cylindrical bores generally have normal clearance (C0). Greater bearing clearance is possible in both instances.

# Sealing Systems

## Felt strip seal

The felt strip, as under DIN 5419, is the reliable standard sealing for many SNR bearing housings. It is easy to fit and can be used for circumferential speeds up to 5 m/s, after a running-in period (approx. 2 hours) up to 15 m/s. Felt seals are suitable for grease lubrication and temperatures of -20 to +100 °C. At higher temperatures up to approx. 300 °C we will be pleased to offer you a selection of special materials.\*

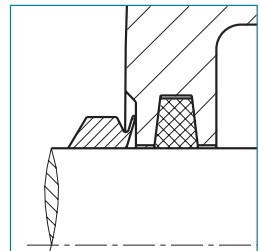


## V-ring seal

Bearing housings which are processed on the front end can be equipped with a V-ring seal. We mainly use V-rings in combination with felt strips. Instead of a felt strip a double lip seal can also be used. They provide additional and inexpensive protection against the ingress of moisture into the bearing housing.

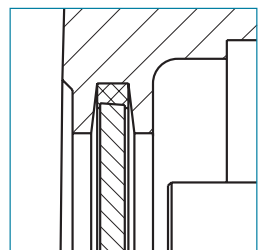
V-rings can be used for circumferential speeds up to 15 m/s. They are made of nitrile rubber (NBR) and suitable for temperatures up to 100 °C. Special materials are available on request for higher temperatures (e.g. Viton).\*

These sealing variants are not only suitable for grease lubricated housings, but also as an auxiliary sealing for oil lubricated bearing housings.



## End cover

If the shaft ends in the housing then this is to be sealed with a cover. End covers are made of grey cast iron and fitted with a felt strip. They are suitable for temperatures up to 100 °C.



\* For temperatures in excess of 120 °C, please contact an SNR engineer concerning bearing and grease selection.



### Double lip seal

Each SNR bearing housing can accommodate a double lip seal in the ring groove (where available). The design of this seal, which is also made of the NBR (nitrile rubber) material, excels on account of the following sealing properties:

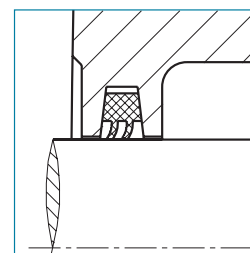
- low increase in friction torque
- optimum protection against foreign particles and moisture
- Improvement in sealing performance through introduction of lubrication grease between the sealing lips when mounting and continuously during operation.

Maximum shaft misalignment:  $\pm 0.5^\circ$

Maximum circumferential speed of shaft: 15m/s

Maximum service temperature:  $-20\text{ }^\circ\text{C}$  to  $+110\text{ }^\circ\text{C}$

For applications up to  $200\text{ }^\circ\text{C}^*$  double lip seals made of Viton or PTFE are available on request.

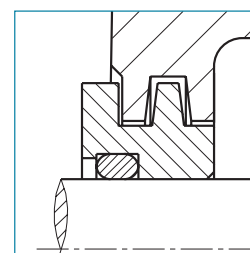


### Labyrinth ring with round cord

Several bearing housings can be equipped with this non-contact sealing variant. The round cord inserted between the labyrinth ring and the shaft serves to lift the labyrinth ring. Any limitation of the circumferential speed with this seal is not necessary.

Maximum shaft misalignment:  $\pm 0.5^\circ$

Maximum temperature:  $200\text{ }^\circ\text{C}^*$



### Application range of individual seals

|                 | Housing |     |    |     |     |      |        |        |            |   |
|-----------------|---------|-----|----|-----|-----|------|--------|--------|------------|---|
|                 | SNOE    | TVN | TN | ZLG | DLG | ZLOE | 722500 | F11200 | SD 3100 TS |   |
| Felt strips     |         | •   | •  | •   | •   |      | •      | •      |            |   |
| V-ring          | •       |     |    | •   | •   | •    |        |        |            |   |
| Double lip seal |         | •   |    | •   | •   |      | •      |        |            |   |
| Labyrinth ring  | •       |     |    |     |     | •    |        |        |            | • |
| End cover       | •       | •   |    |     |     |      | •      |        |            | • |

• = Seal can be used without modifying housing

\* For temperatures in excess of  $120\text{ }^\circ\text{C}$  please contact an SNR engineer concerning bearing and grease selection

# Grease Lubrication

## Grease Lubrication

In the overwhelming majority of bearing housing applications grease lubrication is used for the bearing location. Depending on the service case, the initial grease application when fitting should last for a bearing service life. At higher loads, temperatures or speeds the volume of the lubrication medium loses its lubricating capability in the course of service as a consequence of mechanical load, ageing and increasing contamination.

In this case grease must be added to or changed.

If the service case demands regular lubrication then all SNR bearing housings can be equipped with grease nipples. Several of our housings are already equipped as standard with one or more grease nipples. If this should prove insufficient, we would recommend the use of the SNR grease bushing (see annex). This will ensure that there is continuous re-lubrication of the bearing positions for up to 12 months.

If it is necessary to re-lubricate the bearing housing, there is a risk that too much grease may be left in the interior of the housing. The consequence of this can be an increase in bearing temperature up to overheating of the bearing. To prevent this some SNR bearing housings, in particular at high operating temperatures, have grease regulation discs inserted in them.

The grease regulation disc ensures that any excess grease is removed and thus prevents any excessive grease application to the bearing.

For every re-lubrication process the re-lubrication quantity and compatibility of the new grease with the existing grease must be observed.

Information hereto is available in the following tables.

### Basic oils

|                         | Mineral oil | Diester oil | Polyalkylene glycol oil | Silicon oil (Methyl) | Silicon oil (Phenyl) | Polyvinyl ether oil |
|-------------------------|-------------|-------------|-------------------------|----------------------|----------------------|---------------------|
| Diester oil             |             | +           |                         |                      |                      |                     |
| Polyalkylene glycol oil | •           | +           |                         |                      |                      |                     |
| Silicon oil (Methyl)    | •           | •           | •                       |                      |                      |                     |
| Silicon oil (Phenyl)    | +           | +           | •                       | +                    |                      |                     |
| Polyvinyl ether         | +           | +           | •                       | •                    | +                    |                     |
| Perfluoropolyether      | •           | •           | •                       | •                    | •                    | •                   |

+ = mixable

• = not mixable

Source: Klüber

## Sealing compound

|                  | Li soap | Na soap | Al complex | Ba complex | Na complex | Bentonite grease |
|------------------|---------|---------|------------|------------|------------|------------------|
| Na soap          | •       |         |            |            |            |                  |
| Al complex       | +       | +       |            |            |            |                  |
| Ba complex       | +       | +       | +          |            |            |                  |
| Na complex       | +       | +       | •          | +          |            |                  |
| Bentonite grease | +       | +       | •          | +          | •          |                  |
| Polyurea         | +       | +       | +          | +          | +          | +                |

+ = mixable

• = not mixable

Source: Klüber

The SNR-LUB EP grease is a lithium soap based mineral oil grease and ideally suitable for the following conditions:

- Operating speed of bearing max. 80% of limit speed
- Bearing operating temperature < 100 °C
- Bearing load ratio C/P < 3.5

In the event of divergent operating conditions please contact the SNR engineers. An overview of the general range of SNR-LUB standard greases is available in a special leaflet.

### Oil lubrication

Oil lubrication is much more extensive than grease lubrication. Devices for oil supply and for monitoring the oil level must be provided. In the event of an oil circulating lubrication a pump is also required to generate the oil flow. Apart from this greater effort is required to seal the housing.

We recommend oil lubrication in the following instances, if:

- the operating conditions for a bearing (e. g. high speeds) no longer permit grease lubrication;
- dissipation of the bearing position heat must take place over the lubricant;
- other machine elements, such as, e.g. gears, require

oil lubrication.

Mineral oil based oils are mainly used in the lubrication of bearings.

At particularly high or low temperatures we recommend synthetic based oils.

The viscosity of the lubrication oil is primarily geared towards the prevalent temperature influences. Under normal operating conditions (room temperature < 25 °C) the required viscosity at 40 °C is roughly 60 - 120 mm<sup>2</sup>/S. At higher room temperatures (30 - 50 °C), in small rooms with low air circulation and/or external heating the required viscosity at 40 °C is approx. 120 - 190 mm<sup>2</sup>/S.

A higher viscosity should be selected, if:

- more unfavourable heat dissipation conditions prevail;
- the ratio is  $F_a/F_r > e$ ;
- the operating speed less than 20% of the speed limit.

At speeds that are higher than 70% of the speed limit, a lubrication oil with a lower viscosity should be used.



## | Bearing Clearance

Double-row spherical roller bearings with tapered bore (models 21000 K, 22000 K, 23000 K with concentricity 1:12 and model 24000 K with concentricity 1:30) can be fitted with an adapter sleeve or a withdrawal sleeve, and directly in the event of a tapered shaft. The mounting process causes the inner ring to be expanded and this in turn reduces the radial clearance. The remaining bearing clearance must be checked after mounting is complete.

### How to measure it:

#### 1.) Caution:

One may not perform the measurement on a greased bearing, because the thickness of the lubrication film prevents an accurate measurement from being made.

#### 2.) Tools:

Check the bearing clearance using a feeler gauge. One slides the gauge between the outer ring and rollers. For bearings with a large radial clearance one may not use feeler gauges of more than 0.15 mm, because they are too rigid to be adapted to the spherical bearing surface. Here one should use several smaller tabs together to achieve the desired thickness.

### Checking clearance before mounting:

Place the bearing in a vertical position, so that at both sides the rollers abut with the closing edges of the outer ring. Turn the inner ring by hand and apply a radial load in the vertical direction. Determine the theoretical radial clearance with the aid of the table. Slide the gauge between the relieved, i.e. the upper rollers and the outer ring. Now one has to start checking with the smallest gauge between the rollers and the outer ring.

The thickness of the gauge is now increased in increments. The radial clearance lies between the last gauge, which can be moved between the roller and outer ring, and the gauge, which is stuck between the roller and the outer ring.

### Checking clearance after mounting:

To determine the remaining clearance proceed as described under the heading "Checking clearance before mounting". Check the reduction of the clearance after mounting in the table below and determine with the aid of the previously described measures, whether the minimum or maximum value has been maintained.



## Radial clearance reduction when installing SNR spherical roller bearings with tapered bore

| Nominal dimension of bearing bore | Radial clearance before installation<br>Bearing clearance group |       |             |       |         |       | Reduction of radial clearance | Displacement on tapered diameter 1:12 |       |          |      | Displacement on tapered diameter 1:30 |      |            |      | Check value for smallest radial clearance after installation<br>Clearance group |      |            |  |             |       |        |
|-----------------------------------|---|-------|-------------|-------|---------|-------|-------------------------------|---------------------------------------|-------|----------|------|---------------------------------------|------|------------|------|---|------|------------|--|-------------|-------|--------|
|                                   | d over up to [mm]   |       | normal [mm] |       | C3 [mm] |       |                               | C4 [mm]                               |       | min [mm] |      | max [mm]                              |      | Shaft [mm] |      | Sleeve [mm]   |      | Shaft [mm] |  | Sleeve [mm] |       | normal |
| 30                                | 40  | 0,035 | 0,05        | 0,05  | 0,065   | 0,065 | 0,085                         | 0,02                                  | 0,025 | 0,35     | 0,4  | 0,35                                  | 0,45 |            |      |   |      |            |  | 0,015       | 0,025 | 0,04   |
| 40                                | 50  | 0,045 | 0,06        | 0,06  | 0,08    | 0,08  | 0,1                           | 0,025                                 | 0,03  | 0,4      | 0,45 | 0,45                                  | 0,5  |            |      |   |      |            |  | 0,02        | 0,03  | 0,05   |
| 50                                | 65  | 0,055 | 0,075       | 0,075 | 0,095   | 0,095 | 0,12                          | 0,03                                  | 0,04  | 0,45     | 0,6  | 0,5                                   | 0,7  |            |      |   |      |            |  | 0,025       | 0,035 | 0,055  |
| 65                                | 80  | 0,07  | 0,095       | 0,095 | 0,12    | 0,12  | 0,15                          | 0,04                                  | 0,05  | 0,6      | 0,75 | 0,7                                   | 0,85 |            |      |   |      |            |  | 0,025       | 0,04  | 0,07   |
| 80                                | 100   | 0,08  | 0,11        | 0,11  | 0,14    | 0,14  | 0,18                          | 0,045                                 | 0,06  | 0,7      | 0,9  | 0,75                                  | 1,0  | 1,7        | 2,2  | 1,8   | 2,4  |            |  | 0,035       | 0,05  | 0,08   |
| 100                               | 120   | 0,1   | 0,135       | 0,135 | 0,17    | 0,17  | 0,22                          | 0,05                                  | 0,07  | 0,7      | 1,1  | 0,8                                   | 1,2  | 1,9        | 2,7  | 2,0   | 2,8  |            |  | 0,05        | 0,065 | 0,1    |
| 120                               | 140   | 0,12  | 0,16        | 0,16  | 0,2     | 0,2   | 0,26                          | 0,065                                 | 0,09  | 1,1      | 1,4  | 1,2                                   | 1,5  | 2,7        | 3,5  | 2,8   | 3,6  |            |  | 0,055       | 0,08  | 0,11   |
| 140                               | 160   | 0,13  | 0,18        | 0,18  | 0,23    | 0,23  | 0,3                           | 0,075                                 | 0,1   | 1,2      | 1,6  | 1,3                                   | 1,7  | 3,0        | 4,0  | 3,1   | 4,2  |            |  | 0,055       | 0,09  | 0,13   |
| 160                               | 180   | 0,14  | 0,2         | 0,2   | 0,26    | 0,26  | 0,34                          | 0,08                                  | 0,11  | 1,3      | 1,7  | 1,4                                   | 1,9  | 3,2        | 4,2  | 3,3   | 4,6  |            |  | 0,06        | 0,1   | 0,15   |
| 180                               | 200   | 0,16  | 0,22        | 0,22  | 0,29    | 0,29  | 0,37                          | 0,09                                  | 0,13  | 1,4      | 2,0  | 1,5                                   | 2,2  | 3,5        | 4,5  | 3,6   | 5,0  |            |  | 0,07        | 0,1   | 0,16   |
| 200                               | 225   | 0,18  | 0,25        | 0,25  | 0,32    | 0,32  | 0,41                          | 0,1                                   | 0,14  | 1,6      | 2,2  | 1,7                                   | 2,4  | 4,0        | 5,5  | 4,2   | 5,7  |            |  | 0,08        | 0,12  | 0,18   |
| 225                               | 250   | 0,2   | 0,27        | 0,27  | 0,35    | 0,35  | 0,45                          | 0,11                                  | 0,15  | 1,7      | 2,4  | 1,8                                   | 2,6  | 4,2        | 6,0  | 4,6   | 6,2  |            |  | 0,09        | 0,13  | 0,2    |
| 250                               | 280   | 0,22  | 0,3         | 0,3   | 0,39    | 0,39  | 0,49                          | 0,12                                  | 0,17  | 1,9      | 2,6  | 2,0                                   | 2,9  | 4,7        | 6,7  | 4,8   | 6,9  |            |  | 0,1         | 0,14  | 0,22   |
| 280                               | 315   | 0,24  | 0,33        | 0,33  | 0,43    | 0,43  | 0,54                          | 0,13                                  | 0,19  | 2,0      | 3,0  | 2,2                                   | 3,2  | 5,0        | 7,5  | 5,2   | 7,7  |            |  | 0,11        | 0,15  | 0,24   |
| 315                               | 355   | 0,27  | 0,36        | 0,36  | 0,47    | 0,47  | 0,59                          | 0,15                                  | 0,21  | 2,4      | 3,4  | 2,6                                   | 3,6  | 6,0        | 8,2  | 6,2   | 8,4  |            |  | 0,12        | 0,17  | 0,26   |
| 355                               | 400   | 0,3   | 0,4         | 0,4   | 0,52    | 0,52  | 0,65                          | 0,17                                  | 0,23  | 2,6      | 3,6  | 2,9                                   | 3,9  | 6,5        | 9,0  | 6,8   | 9,2  |            |  | 0,13        | 0,19  | 0,29   |
| 400                               | 450   | 0,33  | 0,44        | 0,44  | 0,57    | 0,57  | 0,72                          | 0,2                                   | 0,26  | 3,1      | 4,1  | 3,4                                   | 4,4  | 7,7        | 10,0 | 8,0   | 10,4 |            |  | 0,13        | 0,2   | 0,31   |
| 450                               | 500   | 0,37  | 0,49        | 0,49  | 0,63    | 0,63  | 0,79                          | 0,21                                  | 0,28  | 3,3      | 4,4  | 3,6                                   | 4,8  | 8,2        | 11,0 | 8,4   | 11,2 |            |  | 0,16        | 0,23  | 0,35   |
| 500                               | 560   | 0,41  | 0,54        | 0,54  | 0,68    | 0,68  | 0,87                          | 0,24                                  | 0,32  | 3,7      | 5,0  | 4,1                                   | 5,4  | 9,2        | 12,5 | 9,6   | 12,8 |            |  | 0,17        | 0,25  | 0,36   |
| 560                               | 630   | 0,46  | 0,6         | 0,6   | 0,76    | 0,76  | 0,98                          | 0,26                                  | 0,35  | 4,0      | 5,4  | 4,4                                   | 5,9  | 10,0       | 13,5 | 10,4  | 14,0 |            |  | 0,2         | 0,29  | 0,41   |
| 630                               | 710   | 0,51  | 0,67        | 0,67  | 0,85    | 0,85  | 1,09                          | 0,3                                   | 0,4   | 4,6      | 6,2  | 5,1                                   | 6,8  | 11,5       | 15,5 | 12,0  | 16,0 |            |  | 0,21        | 0,31  | 0,45   |
| 710                               | 800   | 0,57  | 0,75        | 0,75  | 0,96    | 0,96  | 1,22                          | 0,34                                  | 0,45  | 5,3      | 7,0  | 5,8                                   | 7,6  | 13,3       | 17,5 | 13,6  | 18,0 |            |  | 0,23        | 0,35  | 0,51   |
| 800                               | 900   | 0,64  | 0,84        | 0,84  | 1,07    | 1,07  | 1,37                          | 0,37                                  | 0,5   | 5,7      | 7,8  | 6,3                                   | 8,5  | 14,3       | 19,5 | 14,8  | 20,0 |            |  | 0,27        | 0,39  | 0,57   |
| 900                               | 1000  | 0,71  | 0,93        | 0,93  | 1,19    | 1,19  | 1,52                          | 0,41                                  | 0,55  | 6,3      | 8,5  | 7,0                                   | 9,4  | 15,8       | 21,0 | 16,4  | 22,0 |            |  | 0,3         | 0,43  | 0,64   |
| 1000                              | 1120  | 0,78  | 1,02        | 1,02  | 1,3     | 1,3   | 1,65                          | 0,45                                  | 0,6   | 6,8      | 9,0  | 7,6                                   | 10,2 | 17,0       | 23,0 | 18,0  | 24,0 |            |  | 0,32        | 0,48  | 0,7    |
| 1120                              | 1250  | 0,86  | 1,12        | 1,12  | 1,42    | 1,42  | 1,8                           | 0,49                                  | 0,65  | 7,4      | 9,8  | 8,3                                   | 11,0 | 18,5       | 25,0 | 19,6  | 26,0 |            |  | 0,34        | 0,54  | 0,77   |

# Maintenance: installation-removal Quality, for a longer service life

*Know-how and cleanliness are essential factors for bearing installation and removal.  
SNR proposes suitable tools, tailored to your needs to optimize bearing service life.*

- a - Induction heating devices: Fast Therm 20/35/150/300/600/1000
- b - Installation kit
- c - Wrench for standard and precision locknuts
- d - Hydraulic extractor, 10T
- e - Kevlar<sup>®</sup>, heat-resistant gloves



a



b



c



d



e



*You will find all our products in  
SNR's Maintenance catalogue: 64 pages of solutions.*

- Lubrication
- Installation & removal
- Measurement & monitoring
- Vibratory analysis, training, ...

## | Before Mounting

The bearings, adapter sleeves, locating rings and grease regulation discs are not to be removed from their original packaging until immediately before they are mounted. Do not wash the bearings!

## | Mating Structure

The flatness tolerance of the bolting surface of our bearing housing should be IT7, relative to the housing foot diagonal.

For surface roughness we recommend  $Rz \leq 100 \mu\text{m}$ .

## | Mounting Bearings On The Shaft

### **Bearings with cylindrical bores**

One makes a differentiation between mounting in a warm or cold condition. The type of mounting process is geared towards the bearing sizes, whereby bearings with small diameters should be cold and bearings with large diameters should be warm when mounted. The use of an [SNR induction heating device](#)\* enables the bearing to be heated to the prescribed temperature, in order to mount it easily onto the shaft. When mounting cold a hydraulic press or other aid should be used. When mounting with a mounting sleeve and hammer make sure that the load is always applied to the fixed bearing ring. The grease regulation disc must be mounted onto the shaft before the bearing is mounted. After mounting the bearing, check whether the shaft shoulders contact each other. Finally the bearings are fixed in accordance with the installation drawing in an axial direction.

### **Bearing with tapered bore (adapter sleeve attachment)**

Bearing radial clearance is to be checked using feeler gauges (to do so use SNR- feeler gauges + mounting card). Slide the bearing onto the sleeve and then fit the lock washer and nut. Do not yet tighten the nut. Slide the pre-mounted bearing with the sleeve into the desired position on the shaft. The floating bearing should always be in the centre of the housing. To check this one can place the shaft provisionally into the housing. Now the adapter sleeve can be tightened with the aid of a hook spanner. While tightening the reduction in clearance in the bearing must be constantly checked with the aid of a feeler gauge. The specified clearance reduction is available in the SNR mounting card or you can read off the necessary displacement. Self-aligning ball bearings are clamped until the clearance is almost zero and the outer ring can still be swivelled by hand. The nut of the adapter sleeve is determined by bending a tab of the lock washer in a groove of the nut. The bearings are then filled with the required quantity of grease.

## | Operating And Maintenance Instructions

Comprehensive operating and maintenance instructions for SNR bearing housing is available in several languages. Im Bedarfsfall senden wir Ihnen diese gerne zu.

\* Our induction heating devices are available in our Maintenance catalogue as from page 45.

## SNOE Plummer Block Housings (oil version)

Oil version plummer block housings of models SNOE 200 and SNOE 300 are mounted with spherical roller bearings with cylindrical bore of the 22200 or 22300 series.

Oil lubricated plummer block housings are suitable for high speeds and are, e.g. used in the ventilator industry.

### | Designs

SNR supplies these plummer block housings in design A with a sealed cover for the shaft ends and in design B with open cover for through shafts. Plummer block housings can be ordered as floating bearing (AL, BL) and locating bearing (AF, BF). The floating bearing function is safeguarded through the housing adaptation (G6). The bearing is axially fastened in place by the cover in the locating bearing design.

The housing body is two-piece for easier mounting; the cover and labyrinth rings are single piece.





## | Sealing Systems

The gap between the housing and the cover is sealed with a flat seal. The sealing surfaces are also coated with a sealing compound. A labyrinth ring is used for sealing between the shaft and cover, which enables the shaft to be misaligned by up to 0.25°. Blocking grease chambers are integrated into the open covers as additional seals; they can be subsequently lubricated by way of a button head lubricating nipple DIN 3404 M10x1.

## | Lubrication

The housings are filled with oil by way of a filling bore in the housing cap. A vent screw is then mounted into this bore. When in service oil is distributed by way of a ring oiler, which carries the oil from the oil sump in the housing base. The oil level in the housing can be read off on an oil level indicator mounted to the cover.



## | Miscellaneous

The ring nut in the housing cap serves to ease handling. It may only be loaded by the weight of the housing and bearing together. Mating threads are available for SPM measuring nipples. Naturally, additional bores, e.g. for temperature sensors can also be fitted by us if requested.

We will also be glad to supply you with SNOE plumber block housings as complete unit with shaft. Provided that you notify us of the dimensions of your mating structure. Example, see Page 58.

# Mine Car Bearing Housings TVN

## | TVN Standard Design

SNR mine car bearing housing models TVN 200 and TVN 300 are equipped with self-aligning ball bearings from the 1200, 1300 series or deep groove ball bearings from the 6200, 6300 series. They are primarily used as journal bearing sets for mine cars.

SNR supplies these plummer block housings in design A with a sealed cover for the shaft ends and in design B with open cover for through shafts. Both designs are available as floating and locating bearings.

This bearing unit is frequently used in rough environments. To provide the bearing here with special protection two felt strips are fitted into the cover and the housing. The housing can accommodate a shaft misalignment of up to 0.5°.

## | TVN Housings For High Temperature Applications

SNR provides these housings as floating bearings only in design A with sealed cover. When used in high temperatures a special sealing system is required. It consists of two hot steam packagings located between the housing and shaft and an additional flat seal between the cover and housing.

Basically, there are two fields of application:

1. Sand-lime brick industry (environment: hot and moist)
2. Other high temperature applications, e.g. clinker hardening plants (environment: hot and dry)

For deployment in sand-lime brick hardening shops the SNR deep groove ball bearings from the 6200 F605 and 6300 F605 series are used. For sealing and lubrication the special lubricant **HOSTAFLON TF 1645** is used. We recommend filling the entire housing. The lubricant penetrates the smallest gaps in the bearing and forms a protective lubricating film there, which simultaneously protects the housing from inside against any moisture ingress.

For dry high temperature applications SNR deep groove ball bearings from the 6200 F600 and 6300 F600 series are used; they can be recognised by the black surface. The **KLÜBER WOLFRASYN ULAF** paste is used here as lubricant. The bearings must be fully greased before they are mounted. In doing so care must be taken to ensure that sufficient lubricant is applied between the raceways and the balls. Once the carrier fluid evaporates all that is left on the bearing is a powder. For these bearings it is possible to use deep groove ball bearings from the 6200 F604 and 6300 F604 series. These bearings are covered on both sides and greased in advance with **KLÜBER WOLFRASYN ULAF**.

## | Plummer Block Housings TN 200

Model TN 200 plummer block housings are single-piece housings and are mounted with self-aligning ball bearings with a wide inner ring. They are primarily used in agricultural engineering. The housings are equipped with covers made of grey cast iron and sealed with felt rings. For re-lubrication purposes an M10x1 threaded bore is provided, which is closed at delivery with a screw plug.



# Double And Triple Bearing Housings

Double bearing and triple bearing housings are mainly developed in our company for the mounting of industrial ventilators. Because these bearing units can be mounted simply and have an extremely accurate guide. They have also become established in other industrial branches. At this point only a few application examples are mentioned: large sawing installations, conveying systems and textile machines.

## Designs

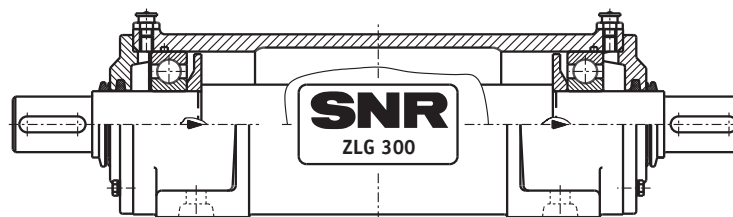
Depending on the load concerned we have developed the following standard variants for you:

### Designs AA - AF in a brief overview

| Type of load                | Designs |      |      |       |       |      |
|-----------------------------|---------|------|------|-------|-------|------|
|                             | AA      | AB   | AC   | AD    | AE    | AF   |
| Radial load                 | +/+     | ++/+ | ++/+ | ++/++ | ++/++ | +/++ |
| Left/right bearing position |         |      |      |       |       |      |
| Axial load – one side       | +       | +    | +    | +     | +     | +    |
| Axial load – both sides     | 0*      | +    | -    | +     | +     | +    |
| Speed                       | ++      | +    | +    | +     | +     | ++   |

0\*: Axial loads on both sides are possible, but only without using the spring washer.

### Design AA



Deep groove ball bearing / Deep groove ball bearing

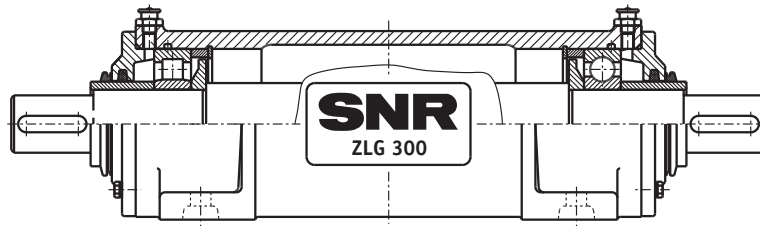
(AA)

High speeds and radial loads are particularly well absorbed here, whereby the axial loads must act from one direction. The spring washer ensures low-noise and smooth operation, something that is particularly valuable at high speeds. If alternating axial loads can be expected then spring washers cannot be used. Please note that in this case the mounting specifications and shaft dimensions change.





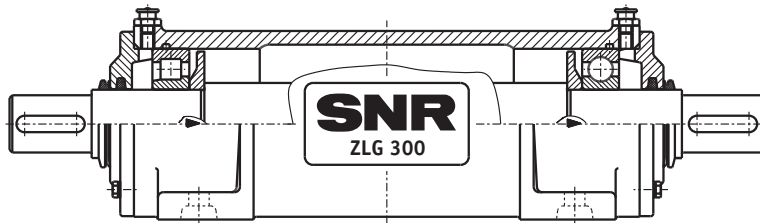
**Design AB**



Cylindrical roller bearing NU / Deep groove ball bearing (AB)

This type of mounting absorbs axial loads from both directions and high radial loads on one side.

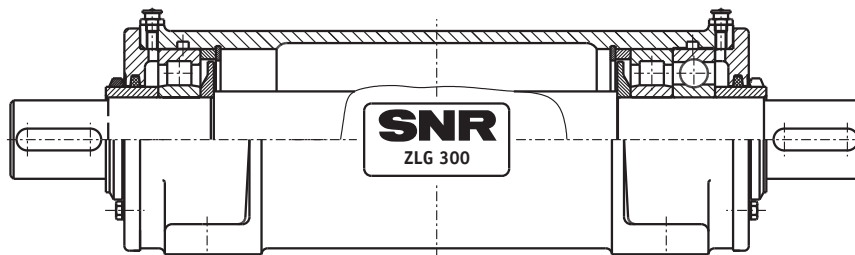
**Design AC**



Cylindrical roller bearing NJ / Deep groove ball bearing (AC)

A bearing unit in this design is used wherever high radial and axial loads from one direction are given. In contrast to design AB the bearings are not axially clamped here. Mounting is also easier because there is no need for retaining rings inside the housing.

**Design AD**

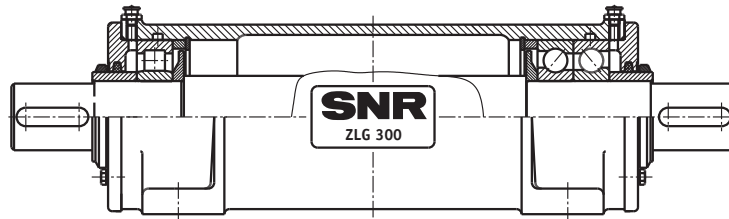


Cylindrical roller bearing / Cylindrical roller bearing, deep groove ball bearing (AD)

Bearing units of this type can absorb significant radial and axial loads from all directions.



### Design AE

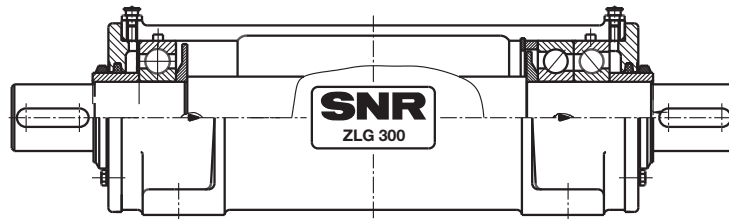


Cylindrical roller bearing / 2x angular contact ball bearings

(AE)

These units are suitable for large axial loads from both directions. They are also able to absorb high radial loads.

### Design AF



Deep groove ball bearing / 2x angular contact ball bearings

(AF)

This design type absorbs high axial loads from one direction, while through the deep groove ball bearing on the one side low to medium radial loads are absorbed.

| Size    | Initial greasing per bearing position | Re-lubrication quantity per bearing |
|---------|---------------------------------------|-------------------------------------|
|         | [cm <sup>3</sup> ]                    | [cm <sup>3</sup> ]                  |
| ZLG 306 | 46                                    | 20                                  |
| ZLG 307 | 85                                    | 26                                  |
| ZLG 308 | 103                                   | 36                                  |
| ZLG 309 | 133                                   | 50                                  |
| ZLG 310 | 168                                   | 67                                  |
| ZLG 311 | 224                                   | 86                                  |
| ZLG 312 | 243                                   | 108                                 |
| ZLG 313 | 333                                   | 132                                 |
| ZLG 314 | 411                                   | 160                                 |
| ZLG 315 | 429                                   | 192                                 |
| ZLG 316 | 590                                   | 227                                 |
| ZLG 317 | 577                                   | 271                                 |
| ZLG 318 | 692                                   | 316                                 |
| ZLG 319 | 734                                   | 308                                 |
| ZLG 320 | 954                                   | 368                                 |
| ZLG 322 | 749                                   | 466                                 |
| ZLG 324 | 966                                   | 657                                 |

| Size    | Initial greasing per bearing position** | Re-lubrication quantity per bearing* |
|---------|---|--------------------------------------|
|         | [cm <sup>3</sup> ]                      | [cm <sup>3</sup> ]                   |
| DLG 314 | 411                                     | 160                                  |
| DLG 315 | 429                                     | 192                                  |
| DLG 316 | 590                                     | 227                                  |
| DLG 317 | 577                                     | 271                                  |
| DLG 318 | 692                                     | 316                                  |
| DLG 319 | 734                                     | 308                                  |
| DLG 320 | 954                                     | 368                                  |
| DLG 322 | 749                                     | 466                                  |
| DLG 324 | 966                                     | 657                                  |

\* For triple-bearing housings note that on one side two bearings must be greased.

\*\* Triple bearing housings are populated on one side with two bearings, for this reason make sure that at this position the quantity for the initial greasing is increased by the quantity required for re-lubrication.

## | Load

The cast-in arrows on the housing side indicate the direction in which axial loads must act in the event that a bearing unit can only have axial loads applied to it on one side.

## | Lubrication

All housings are given 2 button head lubricating nipples DIN 3404-A M10x1, to ensure both bearing positions enjoy optimum re-lubrication. All double and triple bearing housings are equipped with grease regulation discs to regulate the grease quantity at the bearing positions.

### Re-lubrication interval:

In the standard case we recommend re-lubrication of the above-mentioned quantities every 3,000 operating hours (at least 2x a year).

### Grease type:

SNR LUB-EP or Shell Alvania R3

### depending on application:

For applications outside the standard area please ask an SNR engineer for a suitable grease type.



## | Sealing System

Our standard versions are supplied with felt strips and V-rings. This sealing combination acts against any grease escaping while simultaneously preventing any ingress of contamination. For other sealing options such as, e.g. labyrinth ring, GAMMA ring, lamellar rings etc., we will also be glad to provide you with technical assistance.

## | Miscellaneous

Double and triple bearing housings are also available as special versions in small quantities. It is also possible to make bores for various measurement devices.

For a bearing seat fit on the shaft for deep groove ball bearings and cylindrical roller bearings we recommend:

- up to 100 mm=> k6
- over 100 mm=> m6

For angular contact ball bearings a fit of j5 is specified.

The speed limit is determined in each case by the bearings used!

If you notify us the dimensions of the mating structure for your design, we will be glad to supply you with double or triple bearing housings fully mounted, pre-lubricated and with a corresponding shaft. That means that you have the advantage of getting the complete unit from one supplier only.

# Oil Lubricated Double Bearing housings (ZLOE)

For a double bearing housing such as model ZLOE two bearings are in a single-piece housing body as for ZLG. This means that the alignment of individual plummer block housings to each other is no longer required, which in turn rules out any misalignment. Various bearing options are possible. The two most frequent variants are described below.

## Designs

### a) ZLOE...A

This design is equipped with two deep groove ball bearings from the 6200 or 6300 series in supporting bearing arrangement (floating bearing).

Next to radial loads, axial loads can only be absorbed in one direction. The additionally installed spring washer serves to ensure that operation is low noise and smooth, something that is particularly valuable at high speeds. For axial loads on both sides or alternating the bearing opposite the spring washer is secured axially. This then makes it a locating bearing.

Because of its smooth running, in this case the floating bearing is also axially pre-clamped using a spring washer.

### b) ZLOE...B

For this version a deep groove ball bearing from 6200 or 6300 series is installed on the locating bearing side and a cylindrical roller bearing NU 200 or NU 300 installed on the floating bearing side. With this higher radial loads can be absorbed on one side.

### c) Additional designs

Next to these two bearing combinations ZLOE housings, as with the ZLG housing, can be equipped with various additional arrangements of deep groove ball bearings, cylindrical roller bearings, four-point bearing or angular contact ball bearings. A bearing seat has been widened, to enable two bearings (e.g. an O-arrangement of two angular contact ball bearings) to be accommodated.

## Lubrication

ZLOE bearing housings are lubricated with oil, which is distributed by the rotation of the bearings in the raceways. The housing is basically specified for oil bath lubrication. For more stringent requirements it can also be operated using oil circulation or oil spray lubrication. An oil level indicator in the centre of the housing enables the oil level to be read off at any given time when in operation.





## | Sealing System

The gap between the housing and the cover is sealed with a flat seal. A labyrinth with threaded seal (in the cover) in the opposite direction to rotation prevents oil escaping between the cover and the shaft.

## | Miscellaneous

The housing is fastened on the clamping surface using four foot fastening bolts. The housing foot is equipped with punch marks; these enable the housing to be located after mounting with the aid of straight pins.

The housing body and the cover are made as standard from grey cast iron. Depending on the service case they can also be made from other materials. Several models are available in spheroidal graphite iron.

Located at each bearing position are three bores for connection of various measurement and monitoring devices. These bores are sealed in delivery condition with plastic plugs.



## | Flange Bearing Housings 722500

Flange bearing housings, model 722500 have been developed for a wide range of applications. Depending on the application field they are mounted with self-aligning ball bearings from the 1200, 2200 series or spherical roller bearings from the 22200 series (each with tapered bore). The bearings are fastened to the shaft using adapter sleeves.

### | Design

SNR supplies these flange bearing housings in design A with a sealed cover for the shaft ends and in design B with open cover for through shafts. The housings can be ordered as floating bearings and as locating bearings. The locating bearing design is equipped with one or two locating rings. The housing sizes 722505 to 722513 are available as 3-bolt flange housings, sizes 722515 to 722522 as 4-bolt flange housings.

### | Sealing Systems And Lubrication

To prevent the bearing against external contamination and to trap escaping grease, a felt ring or double-lip seals are fitted to the cover and in the housing.

Max. shaft misalignment:  $\pm 0.5^\circ$

Housings are designed for grease lubrication.

An M10x1 threaded hole is provided for re-lubrication purposes.



## Flange Bearing Housings F 11200

Flange bearing housings, model F 11200 are mounted with self-aligning ball bearings with widened inner ring from the 11200 series. They are mainly used for mountings (e.g. in textile machine manufacturing), where simple handling is required. The housing is sealed using two felt rings. For re-lubrication of the bearing the housing comes with an M10x1 threaded hole. The bearing seat in the housing is manufactured to a tolerance of H8. To prevent any contact between the mating parts and the housing, the inner ring of the self-aligning ball bearings protrudes by 1 mm on the cover side.



# I Plummer Block Housings SD 3100 TS

Plummer block housings, model SD 3100 TS are two-piece plummer blocks for shaft diameters of 150 mm to 400 mm. They are mounted with spherical roller bearings with tapered bore from the 23100 series. The bearings are fastened on the shaft using adapter sleeves. These housings are used in heavy machine construction, e.g. conveyor systems, conveyor screws, roll crushers etc.

## | Designs

SNR supplies these housings in design A with an end cover for the shaft ends and in design B with labyrinth rings on both sides for through shafts. The housings are available as floating and locating bearings. Up to a shaft diameter  $d = 180$  mm locating rings are used on both sides of the bearing for the locating bearing design. For larger housings the axial fastening takes place in the housing itself.

## | Sealing System

Plummer block housings are sealed using triple labyrinth rings. For this non-contact seal a round cord is inserted between the ring and shaft to lift it. Using the round cord means that the circumferential speed needn't be limited. Shaft misalignments of  $\pm 0.25^\circ$  relative to the housing are permissible.

## | Lubrication

The plummer block housings are designed for grease lubrication and they can be re-lubricated by means of a button head lubricating nipple DIN 3404 G 1/4", which is mounted at the top of the housing.

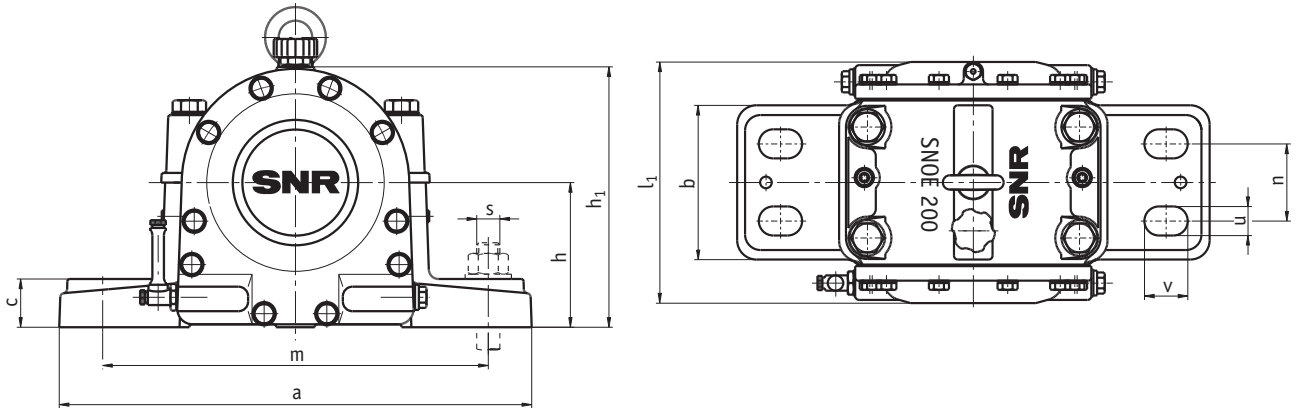
## | Miscellaneous

The ring bolt in the housing cap serves to ease handling. It may only be loaded by the weight of the housing and bearing together.



# Plummer Block Housings SNOE 200

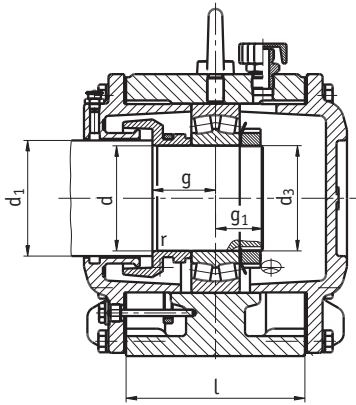
for bearings with cylindrical bore,  
specified for oil lubrication



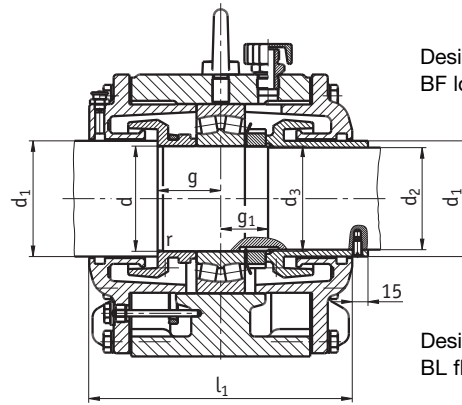
\* = Radius of recess according to DIN 509 Form E

| d   | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | a   | b   | c   | g   | g <sub>1</sub> | h   | h <sub>1</sub> | l   | l <sub>1</sub> | m   | n   | u  | v  | s   | r*   |
|-----|----------------|----------------|----------------|-----|-----|-----|-----|----------------|-----|----------------|-----|----------------|-----|-----|----|----|-----|------|
|     |                |                |                |     |     |     |     |                |     |                |     |                |     |     |    |    |     | max. |
| 85  | 90             | -              | M85x2          | 410 | 150 | 48  | 62  | 37             | 135 | 240            | 160 | 225            | 340 | 80  | 25 | 35 | M20 | 1,0  |
|     |                | 82             |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 90  | 95             | -              | M90x2          | 410 | 150 | 48  | 61  | 40             | 135 | 245            | 160 | 225            | 340 | 80  | 25 | 35 | M20 | 1,0  |
|     |                | 87             |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 95  | 100            | -              | M95x2          | 490 | 160 | 50  | 67  | 42             | 150 | 270            | 170 | 250            | 400 | 80  | 30 | 45 | M24 | 1,0  |
|     |                | 92             |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 100 | 110            | -              | M100x2         | 490 | 160 | 50  | 60  | 45             | 150 | 270            | 170 | 250            | 400 | 80  | 30 | 45 | M24 | 2,5  |
|     |                | 97             |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 110 | 116            | -              | M110x2         | 510 | 165 | 50  | 70  | 49             | 165 | 300            | 175 | 250            | 420 | 80  | 30 | 45 | M24 | 1,6  |
|     |                | 107            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 120 | 126            | -              | M120x2         | 550 | 165 | 55  | 72  | 52             | 175 | 320            | 175 | 250            | 440 | 80  | 36 | 50 | M30 | 1,6  |
|     |                | 117            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 130 | 136            | -              | M130x2         | 570 | 175 | 65  | 77  | 56             | 190 | 345            | 185 | 260            | 460 | 90  | 36 | 50 | M30 | 1,6  |
|     |                | 127            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 140 | 150            | -              | M140x2         | 570 | 175 | 65  | 73  | 58             | 190 | 355            | 180 | 260            | 460 | 100 | 36 | 50 | M30 | 2,5  |
|     |                | 137            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 150 | 156            | -              | M150x2         | 660 | 190 | 70  | 82  | 64             | 220 | 395            | 200 | 275            | 530 | 100 | 42 | 60 | M36 | 1,6  |
|     |                | 147            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 160 | 170            | -              | M160x3         | 660 | 200 | 70  | 80  | 70             | 220 | 400            | 210 | 290            | 530 | 110 | 42 | 60 | M36 | 2,5  |
|     |                | 155            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 170 | 176            | -              | M170x3         | 710 | 200 | 85  | 90  | 73             | 260 | 460            | 210 | 300            | 580 | 110 | 42 | 60 | M36 | 1,6  |
|     |                | 165            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 180 | 190            | -              | M180x3         | 710 | 200 | 85  | 90  | 75             | 260 | 465            | 210 | 300            | 580 | 110 | 42 | 60 | M36 | 2,5  |
|     |                | 175            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 190 | 196            | -              | M190x3         | 820 | 240 | 90  | 95  | 81             | 270 | 485            | 250 | 350            | 670 | 130 | 48 | 70 | M42 | 1,6  |
|     |                | 185            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 200 | 210            | -              | M200x3         | 830 | 240 | 90  | 100 | 83             | 280 | 510            | 260 | 360            | 670 | 130 | 48 | 70 | M42 | 2,5  |
|     |                | 195            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 220 | 230            | -              | TR220x4        | 880 | 240 | 105 | 108 | 92             | 310 | 565            | 280 | 380            | 720 | 130 | 48 | 70 | M42 | 2,5  |
|     |                | 212            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |
| 240 | 260            | -              | TR240x4        | 980 | 280 | 120 | 120 | 100            | 340 | 615            | 300 | 400            | 820 | 165 | 48 | 70 | M42 | 4,0  |
|     |                | 235            |                |     |     |     |     | -              |     |                |     |                |     |     |    |    |     |      |





Design:  
AF locating bearing



Design:  
BF locating bearing

Design:  
AL locating bearing

Design:  
BL floating bearing

**Axial displacement in case of floating bearing arrangement**

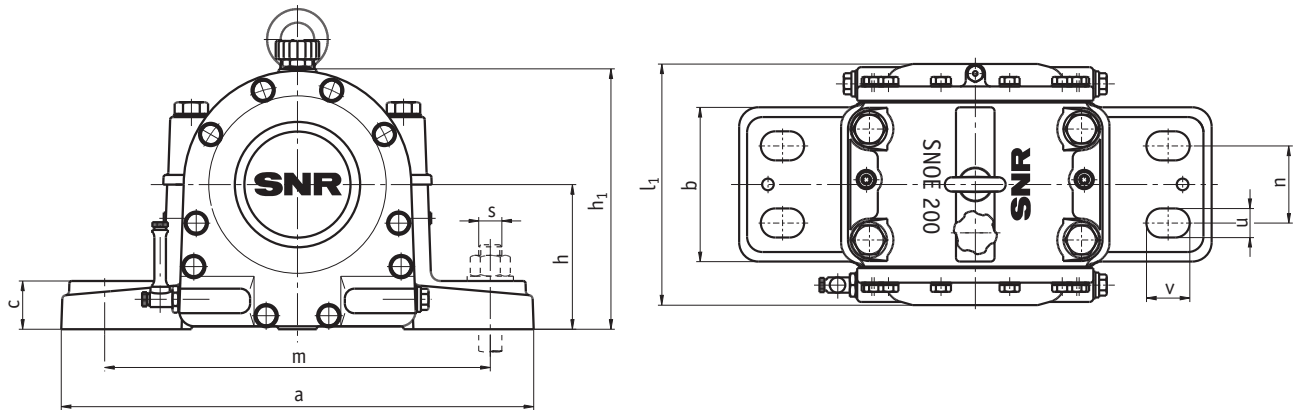
|                  |       |
|------------------|-------|
| SNOE 214 ... 238 | 10 mm |
| SNOE 240 ... 248 | 15 mm |

We will also be glad to supply you with SNOE plummer block housings as complete unit with shaft. Provided that you notify us of the dimensions of your mating structure. Example, see page 58.

| code number      |                  | bearing | mounting parts |             | oil level [mm] | oil quantity for initial fill approx. l | housing weight approx. kg |
|------------------|------------------|---------|----------------|-------------|----------------|---|---------------------------|
| locating bearing | floating bearing |         | lock nut       | lock washer |                |   |                           |
| SNOE 217 AF      | SNOE 217 AL      | 22217   | KM 17          | MB 17       | 50-65          | 1,4                                     | 45                        |
| SNOE 217 BF      | SNOE 217 BL      |         |                |             |                |   |                           |
| SNOE 218 AF      | SNOE 218 AL      | 22218   | KM 18          | MB 18       | 45-60          | 1,5                                     | 47                        |
| SNOE 218 BF      | SNOE 218 BL      |         |                |             |                |   |                           |
| SNOE 219 AF      | SNOE 219 AL      | 22219   | KM 19          | MB 19       | 55-70          | 1,6                                     | 60                        |
| SNOE 219 BF      | SNOE 219 BL      |         |                |             |                |   |                           |
| SNOE 220 AF      | SNOE 220 AL      | 22220   | KM 20          | MB 20       | 50-65          | 1,7                                     | 67                        |
| SNOE 220 BF      | SNOE 220 BL      |         |                |             |                |   |                           |
| SNOE 222 AF      | SNOE 222 AL      | 22222   | KM 22          | MB 22       | 50-70          | 2,1                                     | 74                        |
| SNOE 222 BF      | SNOE 222 BL      |         |                |             |                |   |                           |
| SNOE 224 AF      | SNOE 224 AL      | 22224   | KM 24          | MB 24       | 50-70          | 2,3                                     | 80                        |
| SNOE 224 BF      | SNOE 224 BL      |         |                |             |                |   |                           |
| SNOE 226 AF      | SNOE 226 AL      | 22226   | KM 26          | MB 26       | 55-75          | 2,3                                     | 93                        |
| SNOE 226 BF      | SNOE 226 BL      |         |                |             |                |   |                           |
| SNOE 228 AF      | SNOE 228 AL      | 22228   | KM 28          | MB 28       | 55-70          | 3,7                                     | 100                       |
| SNOE 228 BF      | SNOE 228 BL      |         |                |             |                |   |                           |
| SNOE 230 AF      | SNOE 230 AL      | 22230   | KM 30          | MB 30       | 65-90          | 4,2                                     | 125                       |
| SNOE 230 BF      | SNOE 230 BL      |         |                |             |                |   |                           |
| SNOE 232 AF      | SNOE 232 AL      | 22232   | KM 32          | MB 32       | 60-80          | 4,7                                     | 136                       |
| SNOE 232 BF      | SNOE 232 BL      |         |                |             |                |   |                           |
| SNOE 234 AF      | SNOE 234 AL      | 22234   | KM 34          | MB 34       | 90-105         | 6,0                                     | 160                       |
| SNOE 234 BF      | SNOE 234 BL      |         |                |             |                |   |                           |
| SNOE 236 AF      | SNOE 236 AL      | 22236   | KM 36          | MB 36       | 75-110         | 6,0                                     | 200                       |
| SNOE 236 BF      | SNOE 236 BL      |         |                |             |                |   |                           |
| SNOE 238 AF      | SNOE 238 AL      | 22238   | KM 38          | MB 38       | 70-100         | 7,2                                     | 230                       |
| SNOE 238 BF      | SNOE 238 BL      |         |                |             |                |   |                           |
| SNOE 240 AF      | SNOE 240 AL      | 22240   | KM 40          | MB 40       | 75-100         | 7,2                                     | 250                       |
| SNOE 240 BF      | SNOE 240 BL      |         |                |             |                |   |                           |
| SNOE 244 AF      | SNOE 244 AL      | 22244   | HM 44 T        | MB 44       | 80-110         | 8,2                                     | 310                       |
| SNOE 244 BF      | SNOE 244 BL      |         |                |             |                |   |                           |
| SNOE 248 AF      | SNOE 248 AL      | 22248   | HM 48 T        | MB 48       | 100-125        | 8,4                                     | 385                       |
| SNOE 248 BF      | SNOE 248 BL      |         |                |             |                |   |                           |

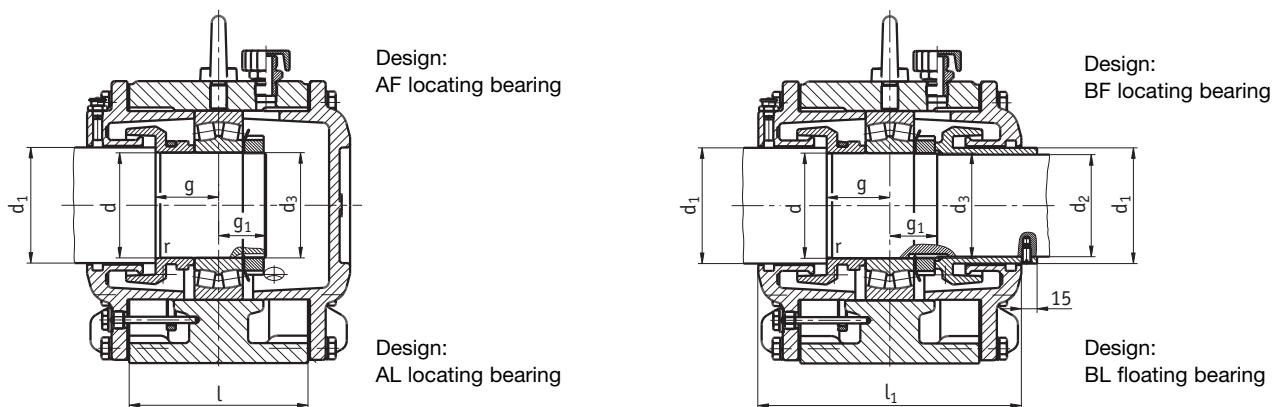
# Plummer Block Housings SNOE 300

for bearings with cylindrical bore,  
specified for oil lubrication



\* = Radius of recess according to DIN 509 Form E

| d   | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | a   | b   | c  | g   | g <sub>1</sub> | h   | h <sub>1</sub> | l   | l <sub>1</sub> | m   | n   | u  | v  | s   | r*   |
|-----|----------------|----------------|----------------|-----|-----|----|-----|----------------|-----|----------------|-----|----------------|-----|-----|----|----|-----|------|
|     |                |                |                |     |     |    |     |                |     |                |     |                |     |     |    |    |     | max. |
| 50  | 55             | -              | M50x1,5        | 350 | 125 | 40 | 52  | 33             | 115 | 205            | 135 | 210            | 290 | 75  | 20 | 30 | M16 | 1,0  |
|     | 47             |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 60  | 65             | -              | M60x2          | 370 | 130 | 45 | 55  | 37             | 125 | 220            | 140 | 220            | 310 | 80  | 20 | 30 | M16 | 1,0  |
|     | 57             |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 70  | 75             | -              | M70x2          | 410 | 150 | 48 | 62  | 41             | 135 | 240            | 160 | 225            | 340 | 80  | 25 | 35 | M20 | 1,0  |
|     | 67             |                |                |     |     |    |     |                |     |                |     |                |     |     |    |    |     |      |
| 80  | 85             | -              | M80x2          | 490 | 160 | 50 | 70  | 47             | 150 | 270            | 170 | 235            | 400 | 80  | 30 | 45 | M24 | 1,0  |
|     | 77             |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 90  | 95             | -              | M90x2          | 500 | 165 | 55 | 72  | 51             | 175 | 305            | 175 | 250            | 420 | 80  | 30 | 45 | M24 | 1,0  |
|     | 87             |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 100 | 106            | -              | M100x2         | 550 | 165 | 55 | 72  | 58             | 175 | 320            | 175 | 250            | 440 | 80  | 36 | 50 | M30 | 1,6  |
|     | 97             |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 110 | 120            | -              | M110x2         | 570 | 180 | 65 | 77  | 62             | 180 | 335            | 190 | 270            | 460 | 95  | 36 | 50 | M30 | 2,5  |
|     | 107            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 120 | 126            | -              | M120x2         | 660 | 200 | 75 | 90  | 66             | 220 | 390            | 210 | 300            | 530 | 110 | 42 | 60 | M36 | 1,6  |
|     | 117            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 130 | 140            | -              | M130x2         | 660 | 200 | 80 | 86  | 72             | 235 | 420            | 220 | 315            | 530 | 110 | 42 | 60 | M36 | 2,5  |
|     | 127            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 140 | 146            | -              | M140x2         | 710 | 220 | 85 | 95  | 76             | 260 | 450            | 230 | 325            | 580 | 125 | 42 | 60 | M36 | 1,6  |
|     | 137            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 150 | 160            | -              | M150x2         | 760 | 200 | 85 | 95  | 82             | 265 | 465            | 240 | 335            | 630 | 125 | 42 | 60 | M36 | 2,5  |
|     | 147            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 160 | 166            | -              | M160x3         | 820 | 240 | 90 | 100 | 86             | 270 | 485            | 250 | 350            | 670 | 130 | 48 | 70 | M42 | 1,6  |
|     | 155            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 170 | 180            | -              | M170x3         | 830 | 240 | 90 | 105 | 92             | 280 | 510            | 255 | 350            | 670 | 130 | 48 | 70 | M42 | 2,5  |
|     | 165            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |
| 180 | 190            | -              | M180x3         | 840 | 240 | 90 | 108 | 95             | 290 | 530            | 260 | 360            | 680 | 130 | 48 | 70 | M42 | 2,5  |
|     | 175            |                |                |     |     |    |     | -              |     |                |     |                |     |     |    |    |     |      |



Axial displacement in case of floating bearing arrangement

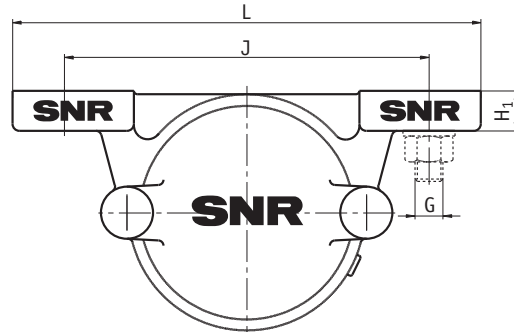
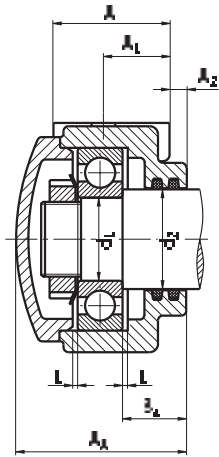
|                  |       |
|------------------|-------|
| SNOE 310 ... 332 | 10 mm |
| SNOE 334 ... 336 | 15 mm |

We will also be glad to supply you with SNOE plummer block housings as complete unit with shaft. Provided that you notify us of the dimensions of your mating structure. Example, see page 58.

| code number      |                  | bearing | mounting parts |             | oil level [mm] | oil quantity for initial fill approx. l | housing weight approx. kg |
|------------------|------------------|---------|----------------|-------------|----------------|---|---------------------------|
| locating bearing | floating bearing |         | lock nut       | lock washer |                |   |                           |
| SNOE 310 AF      | SNOE 310 AL      | 22310   | KM 10          | MB 10       | 50-65          | 0,9                                     | 30                        |
| SNOE 310 BF      | SNOE 310 BL      |         |                |             |                |   |                           |
| SNOE 312 AF      | SNOE 312 AL      | 22312   | KM 12          | MB 12       | 50-65          | 1,0                                     | 35                        |
| SNOE 312 BF      | SNOE 312 BL      |         |                |             |                |   |                           |
| SNOE 314 AF      | SNOE 314 AL      | 22314   | KM 14          | MB 14       | 50-65          | 1,4                                     | 45                        |
| SNOE 314 BF      | SNOE 314 BL      |         |                |             |                |   |                           |
| SNOE 316 AF      | SNOE 316 AL      | 22316   | KM 16          | MB 16       | 55-70          | 1,6                                     | 60                        |
| SNOE 316 BF      | SNOE 316 BL      |         |                |             |                |   |                           |
| SNOE 318 AF      | SNOE 318 AL      | 22318   | KM 18          | MB 18       | 65-85          | 2,3                                     | 73                        |
| SNOE 318 BF      | SNOE 318 BL      |         |                |             |                |   |                           |
| SNOE 320 AF      | SNOE 320 AL      | 22320   | KM 20          | MB 20       | 55-75          | 2,4                                     | 81                        |
| SNOE 320 BF      | SNOE 320 BL      |         |                |             |                |   |                           |
| SNOE 322 AF      | SNOE 322 AL      | 22322   | KM 22          | MB 22       | 45-65          | 2,4                                     | 100                       |
| SNOE 322 BF      | SNOE 322 BL      |         |                |             |                |   |                           |
| SNOE 324 AF      | SNOE 324 AL      | 22324   | KM 24          | MB 24       | 65-90          | 3,7                                     | 130                       |
| SNOE 324 BF      | SNOE 324 BL      |         |                |             |                |   |                           |
| SNOE 326 AF      | SNOE 326 AL      | 22326   | KM 26          | MB 26       | 75-105         | 4,2                                     | 142                       |
| SNOE 326 BF      | SNOE 326 BL      |         |                |             |                |   |                           |
| SNOE 328 AF      | SNOE 328 AL      | 22328   | KM 28          | MB 28       | 80-110         | 6,7                                     | 170                       |
| SNOE 328 BF      | SNOE 328 BL      |         |                |             |                |   |                           |
| SNOE 330 AF      | SNOE 330 AL      | 22330   | KM 30          | MB 30       | 75-110         | 6,2                                     | 200                       |
| SNOE 330 BF      | SNOE 330 BL      |         |                |             |                |   |                           |
| SNOE 332 AF      | SNOE 332 AL      | 22332   | KM 32          | MB 32       | 80-105         | 7,0                                     | 240                       |
| SNOE 332 BF      | SNOE 332 BL      |         |                |             |                |   |                           |
| SNOE 334 AF      | SNOE 334 AL      | 22334   | KM 34          | MB 34       | 80-105         | 7,2                                     | 270                       |
| SNOE 334 BF      | SNOE 334 BL      |         |                |             |                |   |                           |
| SNOE 336 AF      | SNOE 336 AL      | 22336   | KM 36          | MB 36       | 80-105         | 7,4                                     | 330                       |
| SNOE 336 BF      | SNOE 336 BL      |         |                |             |                |   |                           |

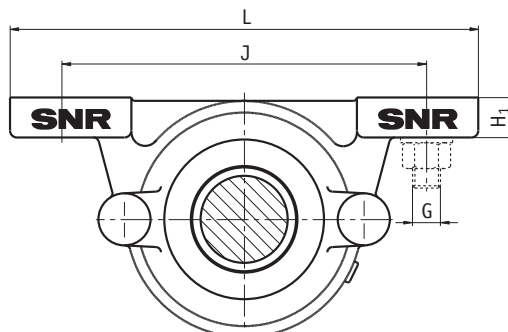
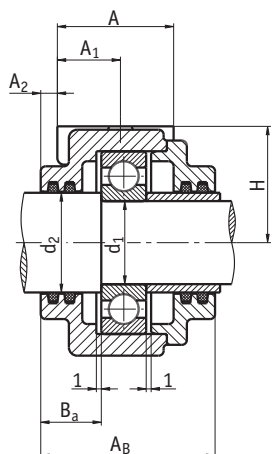
# Mine Car Bearing Housings TVN 200

for bearings with cylindrical bore



Design A  
Housing for shaft ends

| shaft          |                | dimensions [mm]             |                |                |    |                |     |     |    |                |                |                |
|----------------|----------------|-----------------------------|----------------|----------------|----|----------------|-----|-----|----|----------------|----------------|----------------|
| d <sub>1</sub> | d <sub>2</sub> | bearing housing code number | A <sub>A</sub> | A <sub>B</sub> | H  | H <sub>1</sub> | J   | L   | A  | A <sub>1</sub> | A <sub>2</sub> | B <sub>a</sub> |
| 20             | 25             | TVN 204 A                   | 61             |                | 35 | 14             | 110 | 150 | 45 | 25             | 6              | 23,5           |
|                | 25             | TVN 204 B                   |                | 68             | 35 | 14             | 110 | 150 | 45 | 25             | 6              | 23,5           |
| 25             | 30             | TVN 205 A                   | 63             |                | 40 | 16             | 130 | 170 | 45 | 25             | 7              | 24,0           |
|                | 30             | TVN 205 B                   |                | 71             | 40 | 16             | 130 | 170 | 45 | 25             | 7              | 24,0           |
| 30             | 35             | TVN 206 A                   | 71             |                | 50 | 16             | 150 | 190 | 52 | 30             | 7              | 27,0           |
|                | 35             | TVN 206 B                   |                | 76             | 50 | 16             | 150 | 190 | 52 | 30             | 7              | 27,0           |
| 35             | 45             | TVN 207 A                   | 77             |                | 50 | 18             | 150 | 190 | 52 | 30             | 8              | 28,5           |
|                | 45             | TVN 207 B                   |                | 78             | 50 | 18             | 150 | 190 | 52 | 30             | 8              | 28,5           |
| 40             | 50             | TVN 208 A                   | 86             |                | 60 | 18             | 170 | 210 | 60 | 35             | 8              | 33,0           |
|                | 50             | TVN 208 B                   |                | 92             | 60 | 18             | 170 | 210 | 60 | 35             | 8              | 33,0           |
| 45             | 55             | TVN 209 A                   | 87             |                | 60 | 20             | 170 | 210 | 60 | 35             | 8              | 32,0           |
|                | 55             | TVN 209 B                   |                | 92             | 60 | 20             | 170 | 210 | 60 | 35             | 8              | 32,0           |
| 50             | 60             | TVN 210 A                   | 90             |                | 60 | 20             | 170 | 210 | 60 | 35             | 8              | 34,0           |
|                | 60             | TVN 210 B                   |                | 94             | 60 | 20             | 170 | 210 | 60 | 35             | 8              | 34,0           |
| 55             | 65             | TVN 211 A                   | 95             |                | 70 | 23             | 210 | 270 | 70 | 40             | 8              | 34,5           |
|                | 65             | TVN 211 B                   |                | 100            | 70 | 23             | 210 | 270 | 70 | 40             | 8              | 34,5           |
| 60             | 70             | TVN 212 A                   | 102            |                | 70 | 23             | 210 | 270 | 70 | 40             | 10             | 39,0           |
|                | 70             | TVN 212 B                   |                | 105            | 70 | 23             | 210 | 270 | 70 | 40             | 10             | 39,0           |
| 65             | 75             | TVN 213 A                   | 110            |                | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 40,5           |
|                | 75             | TVN 213 B                   |                | 115            | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 40,5           |
| 70             | 80             | TVN 214 A                   | 111            |                | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 40,5           |
|                | 80             | TVN 214 B                   |                | 115            | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 40,5           |
| 75             | 85             | TVN 215 A                   | 115            |                | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 41,5           |
|                | 85             | TVN 215 B                   |                | 117            | 80 | 25             | 230 | 290 | 80 | 45             | 10             | 41,5           |



Design B  
Housing for through shafts

| fastening<br>G | housing<br>weight<br>approx. kg | suitable bearings             |                             | felt strips*     | lock nut | lock washer |
|----------------|---------------------------------|-------------------------------|-----------------------------|------------------|----------|-------------|
|                |                                 | self-aligning<br>ball bearing | deep groove<br>ball bearing |                  |          |             |
| M12            | 1,2                             | 1204                          | 6204                        | FS 6 x 5 x 118   | KM 4     | MB 4        |
| M12            | 1,2                             | 1204                          | 6204                        | FS 6 x 5 x 118   |          |             |
| M12            | 1,4                             | 1205                          | 6205                        | FS 6 x 5 x 132   | KM 5     | MB 5        |
| M12            | 1,4                             | 1205                          | 6205                        | FS 6 x 5 x 132   |          |             |
| M12            | 2,2                             | 1206                          | 6206                        | FS 6 x 5 x 150   | KM 6     | MB 6        |
| M12            | 2,2                             | 1206                          | 6206                        | FS 6 x 5 x 150   |          |             |
| M12            | 2,6                             | 1207                          | 6207                        | FS 6 x 5 x 180   | KM 7     | MB 7        |
| M12            | 2,6                             | 1207                          | 6207                        | FS 6 x 5 x 180   |          |             |
| M12            | 3,7                             | 1208                          | 6208                        | FS 8 x 6,5 x 210 | KM 8     | MB 8        |
| M12            | 3,7                             | 1208                          | 6208                        | FS 8 x 6,5 x 210 |          |             |
| M12            | 4,0                             | 1209                          | 6209                        | FS 8 x 6,5 x 225 | KM 9     | MB 9        |
| M12            | 4,0                             | 1209                          | 6209                        | FS 8 x 6,5 x 225 |          |             |
| M12            | 4,2                             | 1210                          | 6210                        | FS 8 x 6,5 x 240 | KM 10    | MB 10       |
| M12            | 4,2                             | 1210                          | 6210                        | FS 8 x 6,5 x 240 |          |             |
| M16            | 6,2                             | 1211                          | 6211                        | FS 8 x 6,5 x 260 | KM 11    | MB 11       |
| M16            | 6,2                             | 1211                          | 6211                        | FS 8 x 6,5 x 260 |          |             |
| M16            | 6,7                             | 1212                          | 6212                        | FS 9 x 7,5 x 280 | KM 12    | MB 12       |
| M16            | 6,7                             | 1212                          | 6212                        | FS 9 x 7,5 x 280 |          |             |
| M16            | 9,1                             | 1213                          | 6213                        | FS 9 x 7,5 x 300 | KM 13    | MB 13       |
| M16            | 9,1                             | 1213                          | 6213                        | FS 9 x 7,5 x 300 |          |             |
| M16            | 9,4                             | 1214                          | 6214                        | FS 9 x 7,5 x 315 | KM 14    | MB 14       |
| M16            | 9,4                             | 1214                          | 6214                        | FS 9 x 7,5 x 315 |          |             |
| M16            | 9,9                             | 1215                          | 6215                        | FS 9 x 7,5 x 330 | KM 15    | MB 15       |
| M16            | 9,9                             | 1215                          | 6215                        | FS 9 x 7,5 x 330 |          |             |

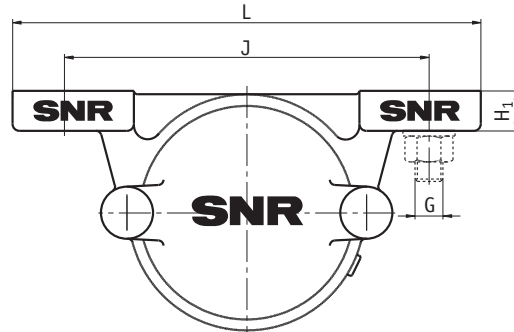
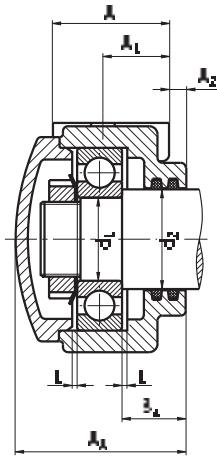
\* = 2x for design A  
4x for design B

TVN also available as hardening car  
bearing housings for high temperature applications (s. p. 37).



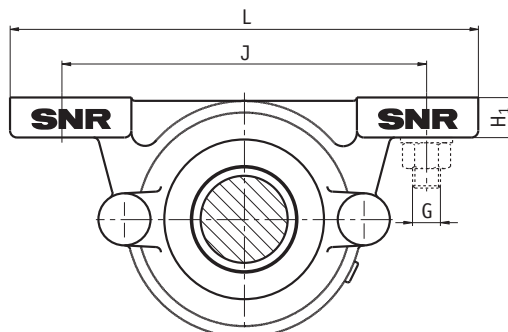
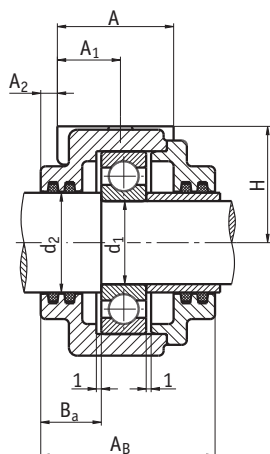
# Mine Car Bearing Housings TVN 300

for bearings with cylindrical bore



Design A  
Housing for shaft ends

| shaft          |                | dimensions [mm]             |                |                |     |                |     |     |     |                |                |                |
|----------------|----------------|-----------------------------|----------------|----------------|-----|----------------|-----|-----|-----|----------------|----------------|----------------|
| d <sub>1</sub> | d <sub>2</sub> | bearing housing code number | A <sub>A</sub> | A <sub>B</sub> | H   | H <sub>1</sub> | J   | L   | A   | A <sub>1</sub> | A <sub>2</sub> | B <sub>a</sub> |
| 20             | 25             | TVN 304 A                   | 63             |                | 40  | 16             | 130 | 170 | 45  | 25             | 7              | 24,0           |
|                | 25             | TVN 304 B                   |                | 71             | 40  | 16             | 130 | 170 | 45  | 25             | 7              | 24,0           |
| 25             | 30             | TVN 305 A                   | 71             |                | 50  | 16             | 150 | 190 | 52  | 30             | 7              | 26,5           |
|                | 30             | TVN 305 B                   |                | 76             | 50  | 16             | 150 | 190 | 52  | 30             | 7              | 26,5           |
| 30             | 40             | TVN 306 A                   | 77             |                | 50  | 18             | 150 | 190 | 52  | 30             | 8              | 27,5           |
|                | 40             | TVN 306 B                   |                | 78             | 50  | 18             | 150 | 190 | 52  | 30             | 8              | 27,5           |
| 35             | 45             | TVN 307 A                   | 86             |                | 60  | 18             | 170 | 210 | 60  | 35             | 8              | 31,5           |
|                | 45             | TVN 307 B                   |                | 92             | 60  | 18             | 170 | 210 | 60  | 35             | 8              | 31,5           |
| 40             | 50             | TVN 308 A                   | 90             |                | 60  | 20             | 170 | 210 | 60  | 35             | 8              | 32,5           |
|                | 50             | TVN 308 B                   |                | 94             | 60  | 20             | 170 | 210 | 60  | 35             | 8              | 32,5           |
| 45             | 55             | TVN 309 A                   | 95             |                | 70  | 23             | 210 | 270 | 70  | 40             | 8              | 32,5           |
|                | 55             | TVN 309 B                   |                | 100            | 70  | 23             | 210 | 270 | 70  | 40             | 8              | 32,5           |
| 50             | 60             | TVN 310 A                   | 102            |                | 70  | 23             | 210 | 270 | 70  | 40             | 10             | 36,5           |
|                | 60             | TVN 310 B                   |                | 105            | 70  | 23             | 210 | 270 | 70  | 40             | 10             | 36,5           |
| 55             | 65             | TVN 311 A                   | 110            |                | 80  | 25             | 230 | 290 | 80  | 45             | 10             | 37,5           |
|                | 65             | TVN 311 B                   |                | 115            | 80  | 25             | 230 | 290 | 80  | 45             | 10             | 37,5           |
| 60             | 70             | TVN 312 A                   | 115            |                | 80  | 25             | 230 | 290 | 80  | 45             | 10             | 38,5           |
|                | 70             | TVN 312 B                   |                | 117            | 80  | 25             | 230 | 290 | 80  | 45             | 10             | 38,5           |
| 65             | 75             | TVN 313 A                   | 122            |                | 95  | 28             | 260 | 330 | 90  | 50             | 12             | 42,5           |
|                | 75             | TVN 313 B                   |                | 127            | 95  | 28             | 260 | 330 | 90  | 50             | 12             | 42,5           |
| 70             | 80             | TVN 314 A                   | 126            |                | 95  | 28             | 260 | 330 | 90  | 50             | 12             | 43,5           |
|                | 80             | TVN 314 B                   |                | 129            | 95  | 28             | 260 | 330 | 90  | 50             | 12             | 43,5           |
| 75             | 85             | TVN 315 A                   | 136            |                | 100 | 30             | 290 | 360 | 100 | 55             | 13             | 47,5           |
|                | 85             | TVN 315 B                   |                | 139            | 100 | 30             | 290 | 360 | 100 | 55             | 13             | 47,5           |



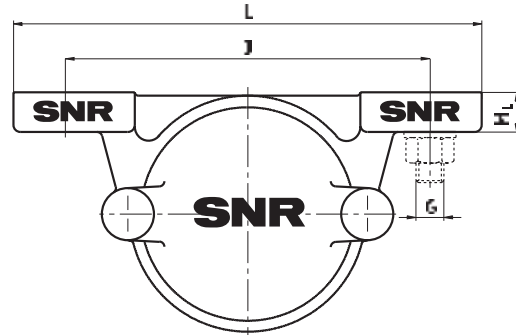
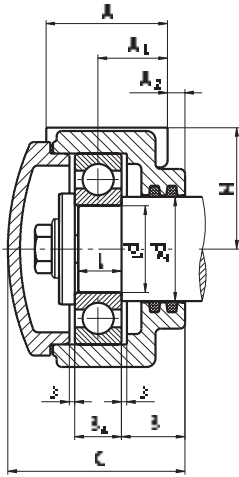
Design B  
Housing for through shafts

| fastening<br>G | housing<br>weight<br>approx. kg | suitable bearings             |                             | felt strips*     | lock nut | lock washer |
|----------------|---------------------------------|-------------------------------|-----------------------------|------------------|----------|-------------|
|                |                                 | self-aligning<br>ball bearing | deep groove<br>ball bearing |                  |          |             |
| M12            | 1,6                             | 1304                          | 6304                        | FS 6 x 5 x 118   | KM 4     | MB 4        |
| M12            | 1,6                             | 1304                          | 6304                        | FS 6 x 5 x 118   |          |             |
| M12            | 2,3                             | 1305                          | 6305                        | FS 6 x 5 x 132   | KM 5     | MB 5        |
| M12            | 2,3                             | 1305                          | 6305                        | FS 6 x 5 x 132   |          |             |
| M12            | 2,6                             | 1306                          | 6306                        | FS 6 x 5 x 165   | KM 6     | MB 6        |
| M12            | 2,6                             | 1306                          | 6306                        | FS 6 x 5 x 165   |          |             |
| M12            | 3,9                             | 1307                          | 6307                        | FS 6 x 5 x 180   | KM 7     | MB 7        |
| M12            | 3,9                             | 1307                          | 6307                        | FS 6 x 5 x 180   |          |             |
| M12            | 4,2                             | 1308                          | 6308                        | FS 8 x 6,5 x 210 | KM 8     | MB 8        |
| M12            | 4,2                             | 1308                          | 6308                        | FS 8 x 6,5 x 210 |          |             |
| M16            | 6,3                             | 1309                          | 6309                        | FS 8 x 6,5 x 225 | KM 9     | MB 9        |
| M16            | 6,3                             | 1309                          | 6309                        | FS 8 x 6,5 x 225 |          |             |
| M16            | 6,9                             | 1310                          | 6310                        | FS 8 x 6,5 x 240 | KM 10    | MB 10       |
| M16            | 6,9                             | 1310                          | 6310                        | FS 8 x 6,5 x 240 |          |             |
| M16            | 9,3                             | 1311                          | 6311                        | FS 8 x 6,5 x 260 | KM 11    | MB 11       |
| M16            | 9,3                             | 1311                          | 6311                        | FS 8 x 6,5 x 260 |          |             |
| M16            | 10,0                            | 1312                          | 6312                        | FS 9 x 7,5 x 280 | KM 12    | MB 12       |
| M16            | 10,0                            | 1312                          | 6312                        | FS 9 x 7,5 x 280 |          |             |
| M20            | 13,5                            | 1313                          | 6313                        | FS 9 x 7,5 x 300 | KM 13    | MB 13       |
| M20            | 13,5                            | 1313                          | 6313                        | FS 9 x 7,5 x 300 |          |             |
| M20            | 14,0                            | 1314                          | 6314                        | FS 9 x 7,5 x 315 | KM 14    | MB 14       |
| M20            | 14,0                            | 1314                          | 6314                        | FS 9 x 7,5 x 315 |          |             |
| M20            | 18,5                            | 1315                          | 6315                        | FS 9 x 7,5 x 330 | KM 15    | MB 15       |
| M20            | 18,5                            | 1315                          | 6315                        | FS 9 x 7,5 x 330 |          |             |

\* = 2x for design A  
4x for design B

TVN also available as hardening car  
bearing housings for high temperature applications (s. p. 37).

# Hardening Car Bearing Housings TVN 6200/6300 for bearing with cylindrical bore, for high temperature applications



| shaft          |                | bearing housing |       | dimensions [mm] |                |     |     |    |                |                |    |                |    |
|----------------|----------------|-----------------|-------|-----------------|----------------|-----|-----|----|----------------|----------------|----|----------------|----|
| d <sub>1</sub> | d <sub>2</sub> | code number     | C     | H               | H <sub>1</sub> | J   | L   | A  | A <sub>1</sub> | A <sub>2</sub> | B  | B <sub>a</sub> | I  |
| 35             | 40             | TVN 6207 A      | 76    | 50              | 18             | 210 | 255 | 57 | 38,5           | 10             | 17 | 30             | 15 |
| 40             | 45             | TVN 6208 A      | 81    | 55              | 17             | 210 | 255 | 56 | 39             | 11             | 18 | 30             | 16 |
| 45             | 55             | TVN 6309 A      | 96    | 70              | 18             | 210 | 256 | 55 | 44             | 10             | 25 | 32,5           | 23 |
| 50             | 60             | TVN 6310 A      | 102   | 70              | 23             | 210 | 270 | 70 | 50             | 10             | 27 | 36,5           | 25 |
| 55             | 65             | TVN 6211 A      | 95    | 70              | 23             | 210 | 270 | 70 | 45             | 8              | 21 | 34,5           | 19 |
| 65             | 75             | TVN 6213 A      | 108,5 | 80              | 25             | 230 | 290 | 80 | 52             | 10             | 23 | 40,5           | 21 |

| fastening<br>G | weight<br>approx. kg | suitable bearing<br>deep groove<br>ball bearing | Hostaflon TF 1645<br>filling quantity in g | hot steam packaging<br>2 x Arolan II |
|----------------|----------------------|---|--|--------------------------------------|
| M16            | 2,6                  | 6207 F605                                       | 50   | 6 x 6 x 145                          |
| M16            | 3,7                  | 6208 F605                                       | 60   | 6 x 6 x 160                          |
| M16            | 6,3                  | 6309 F605                                       | 95   | 6 x 6 x 175                          |
| M16            | 6,9                  | 6310 F605                                       | 140  | 6 x 6 x 205                          |
| M16            | 6,2                  | 6211 F605                                       | 110  | 6 x 6 x 220                          |
| M16            | 9,1                  | 6213 F605                                       | 150  | 8 x 8 x 260                          |

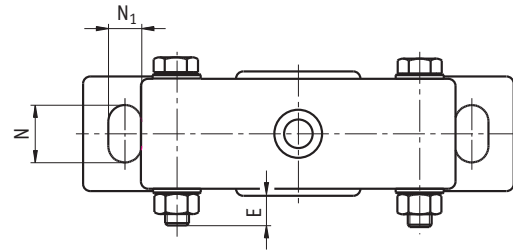
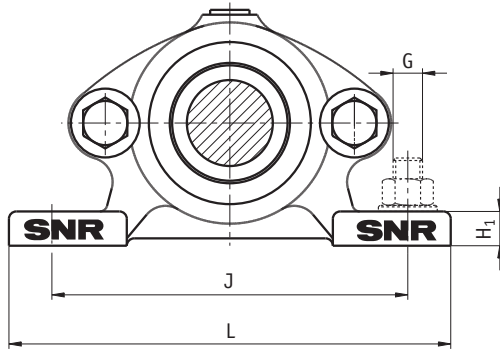
The listed bearing housings with deep groove ball bearing from series **62.. F605** and **63..F605** may only be used in the sand-lime brick hardening shop area.

For all other high temperature applications, e.g. clinker hardening plants, deep groove ball bearings from series **62..F600** and **63.. F600** must be used. The lubricant must also be changed: **Klüber Wolfrasyne U1af**.

Please contact an SNR engineer.

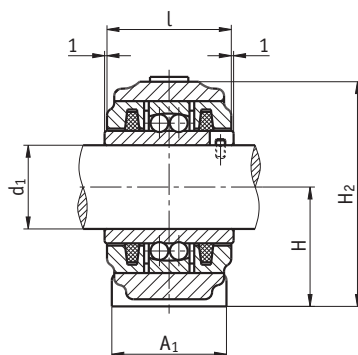
# Plummer Block Housings TN200/300

for self-aligning ball bearing with widened inner ring



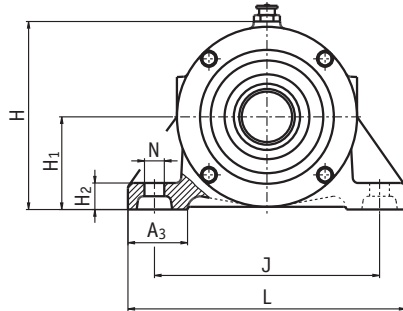
|                |                 | dimensions [mm] |     |                |    |    |     |                |                |                |
|----------------|-----------------|-----------------|-----|----------------|----|----|-----|----------------|----------------|----------------|
| shaft          | bearing housing |                 |     |                |    |    |     |                |                |                |
| d <sub>1</sub> | code number     | H               | J   | N <sub>1</sub> | N  | I  | L   | A <sub>1</sub> | H <sub>1</sub> | H <sub>2</sub> |
| 20             | TN 204          | 40              | 115 | 14             | 20 | 40 | 145 | 42             | 12             | 74             |
|                | TN 304          | 40              | 120 | 14             | 20 | 44 | 150 | 42             | 12             | 77             |
| 25             | TN 205          | 40              | 120 | 14             | 20 | 44 | 150 | 42             | 12             | 77             |
|                | TN 305          | 50              | 130 | 14             | 24 | 48 | 165 | 48             | 14             | 93             |
| 30             | TN 206          | 50              | 130 | 14             | 24 | 48 | 165 | 48             | 14             | 93             |
|                | TN 306          | 50              | 145 | 14             | 24 | 52 | 180 | 48             | 14             | 98             |
| 35             | TN 207          | 50              | 145 | 14             | 24 | 52 | 180 | 48             | 14             | 98             |
|                | TN 307          | 55              | 160 | 14             | 24 | 56 | 195 | 52             | 16             | 108            |
| 40             | TN 208          | 55              | 160 | 14             | 24 | 56 | 195 | 52             | 16             | 108            |
|                | TN 308          | 60              | 175 | 14             | 24 | 58 | 210 | 56             | 16             | 120            |
| 45             | TN 209          | 60              | 175 | 14             | 24 | 58 | 210 | 56             | 16             | 116            |
|                | TN 309          | 65              | 190 | 17             | 27 | 60 | 230 | 62             | 18             | 129            |
| 50             | TN 210          | 60              | 175 | 14             | 24 | 58 | 210 | 56             | 16             | 120            |
|                | TN 310          | 70              | 205 | 17             | 27 | 62 | 245 | 66             | 18             | 140            |
| 55             | TN 211          | 65              | 190 | 17             | 27 | 60 | 230 | 62             | 18             | 129            |
| 60             | TN 212          | 70              | 205 | 17             | 27 | 62 | 245 | 66             | 18             | 140            |



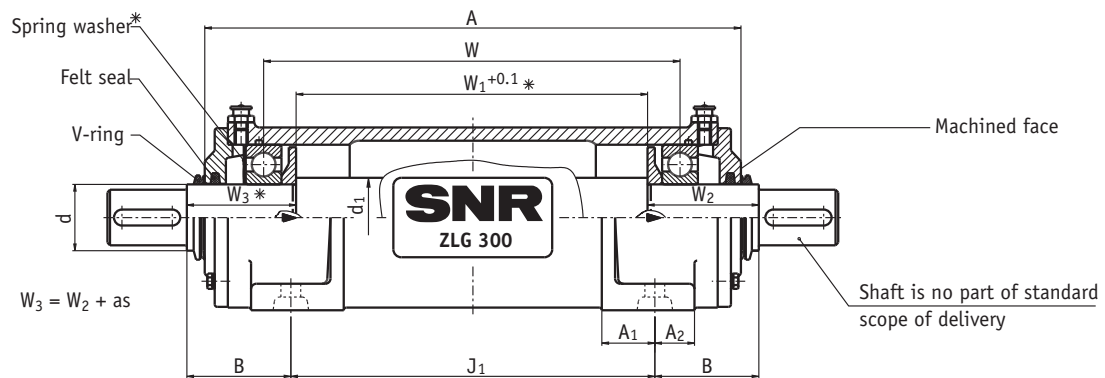


| G   | fastening and mounting | E    | housing weight approx. kg | suitable bearing |
|-----|------------------------|------|---------------------------|------------------|
| M12 |                        | 6,5  | 1,1                       | 11204            |
| M12 |                        | 8,5  | 1,1                       | 11304            |
| M12 |                        | 8,5  | 1,1                       | 11205            |
| M12 |                        | 10,0 | 1,8                       | 11305            |
| M12 |                        | 10,0 | 1,7                       | 11206            |
| M12 |                        | 8,0  | 1,9                       | 11306            |
| M12 |                        | 8,0  | 1,8                       | 11207            |
| M12 |                        | 8,5  | 2,4                       | 11307            |
| M12 |                        | 8,5  | 2,4                       | 11208            |
| M12 |                        | 6,0  | 3,0                       | 11308            |
| M12 |                        | 7,5  | 2,7                       | 11209            |
| M16 |                        | 8,0  | 4,1                       | 11309            |
| M12 |                        | 6,0  | 3,0                       | 11210            |
| M16 |                        | 10,0 | 4,6                       | 11310            |
| M16 |                        | 8,0  | 3,9                       | 11211            |
| M16 |                        | 10,0 | 4,6                       | 11212            |

# Double Bearing Housings ZLG 300



| shaft |                | bearing housing |     |                |                |                |     |                |                |     |                |     |    |       |                |                |      |                |      |    |
|-------|----------------|-----------------|-----|----------------|----------------|----------------|-----|----------------|----------------|-----|----------------|-----|----|-------|----------------|----------------|------|----------------|------|----|
| d     | d <sub>1</sub> | code number     | A   | A <sub>1</sub> | A <sub>2</sub> | A <sub>3</sub> | H   | H <sub>1</sub> | H <sub>2</sub> | J   | J <sub>1</sub> | L   | N  | W     | W <sub>1</sub> | W <sub>2</sub> | B    | d <sub>3</sub> |      |    |
| 30    | 40             | ZLG 306         | 235 | 30             | 20             | 40             | 100 | 50             | 16             | 130 | 150            | 170 | 15 | 173,0 | 140,0          | 57,0           | 53,0 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 174,5 | 141,5          |                |      | 35             |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 174,5 | 140,5          |                |      | -              |      |    |
| 35    | 45             | ZLG 307         | 275 | 30             | 20             | 40             | 117 | 60             | 16             | 150 | 175            | 190 | 15 | 197,0 | 160,0          | 66,5           | 60,0 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 198,5 | 161,5          |                |      | 69,0           | 62,5 | 40 |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 198,5 | 160,5          |                |      | 66,5           | 60,0 | -  |
| 40    | 50             | ZLG 308         | 330 | 36             | 26             | 40             | 121 | 60             | 18             | 150 | 225            | 190 | 15 | 257,0 | 214,0          | 69,5           | 65,0 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 258,5 | 215,5          |                |      | 50             |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 258,5 | 214,5          |                |      | -              |      |    |
| 45    | 55             | ZLG 309         | 370 | 36             | 26             | 45             | 139 | 70             | 20             | 170 | 250            | 210 | 15 | 280,5 | 235,5          | 78,5           | 72,5 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 282,5 | 237,5          |                |      | 55             |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 282,5 | 236,5          |                |      | -              |      |    |
| 50    | 60             | ZLG 310         | 405 | 40             | 30             | 45             | 142 | 70             | 20             | 170 | 275            | 210 | 15 | 314,5 | 265,5          | 81,0           | 77,5 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 316,5 | 267,5          |                |      | 60             |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 316,5 | 266,5          |                |      | -              |      |    |
| 55    | 65             | ZLG 311         | 433 | 40             | 30             | 60             | 158 | 80             | 23             | 210 | 300            | 270 | 20 | 336,5 | 287,5          | 84,0           | 79,0 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 338,5 | 289,5          |                |      | 65             |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 338,5 | 288,0          |                |      | -              |      |    |
| 60    | 70             | ZLG 312         | 479 | 40             | 30             | 60             | 162 | 80             | 23             | 210 | 340            | 270 | 20 | 384,0 | 333,0          | 84,0           | 81,5 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 385,5 | 334,5          |                |      | 87,5           | 85,0 | 70 |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 385,5 | 333,0          |                |      | 84,0           | 81,5 | -  |
| 65    | 75             | ZLG 313         | 503 | 45             | 35             | 60             | 187 | 95             | 25             | 230 | 360            | 290 | 20 | 402,0 | 348,0          | 88,0           | 83,5 | -              |      |    |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 404,5 | 350,5          |                |      | 91,5           | 87,0 | 75 |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 404,5 | 349,0          |                |      | 88,0           | 83,5 | -  |



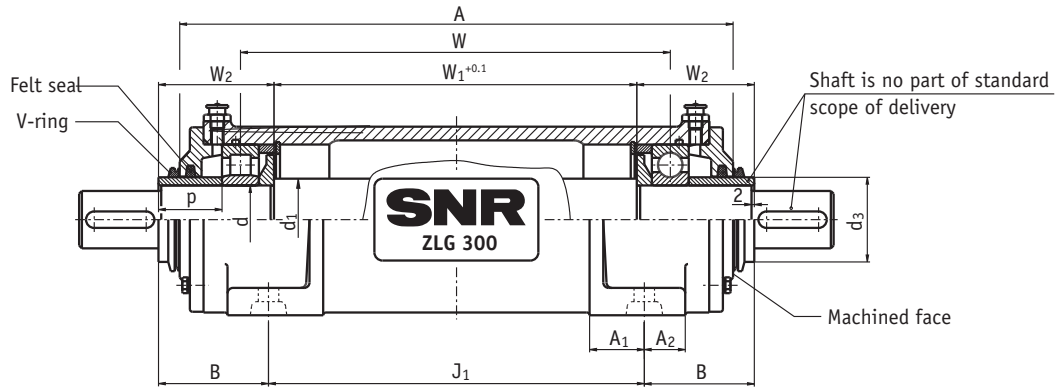
\* The spring washer may not be mounted for alternating axial loads. Dimension W1 is then increased by dimension "as", W3 is then equal to W2.

## Design AA

If you notify us the dimensions of the mating structure for your design, we will be glad to supply you with double or triple bearing housings fully mounted, pre-lubricated and with a corresponding shaft. That means that you have the advantage of getting the complete unit from one supplier only.

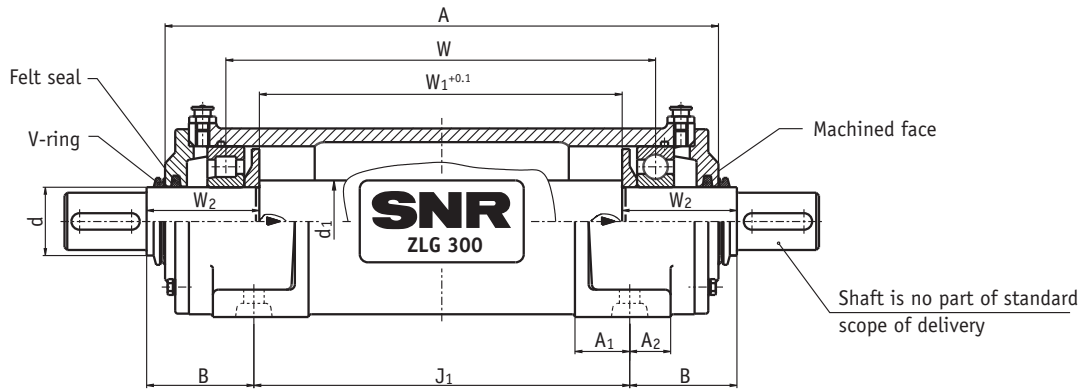
| p    | as  | mounting parts |           | felt ring | V-ring | spring washer | unit designation | housing weight approx. kg |
|------|-----|----------------|-----------|-----------|--------|---------------|------------------|---------------------------|
|      |     | bearing 1      | bearing 2 |           |        |               |                  |                           |
| -    | 1,5 | 6306 C3        | 6306 C3   | FI 7      | V-30S  | ASG 6306      | ZLG 306 AA       | 8                         |
| 31   | -   | NU 306 EG15 C3 |           | FI 8      | V-35S  | -             | ZLG 306 AB       |                           |
| -    | -   | NJ 306 EG15 C3 |           | FI 7      | V-30S  | -             | ZLG 306 AC       |                           |
| -    | 1,5 | 6307 C3        | 6307 C3   | FI 8      | V-35S  | ASG 6307      | ZLG 307 AA       | 10                        |
| 40   | -   | NU 307 EG15 C3 |           | FI 9      | V-40S  | -             | ZLG 307 AB       |                           |
| -    | -   | NJ 307 EG15 C3 |           | FI 8      | V-35S  | -             | ZLG 307 AC       |                           |
| -    | 1,5 | 6308 C3        | 6308 C3   | FI 9      | V-40S  | ASG 6308      | ZLG 308 AA       | 12                        |
| 36,5 | -   | NU 308 EG15 C3 |           | FI 11     | V-50S  | -             | ZLG 308 AB       |                           |
| -    | -   | NJ 308 EG15 C3 |           | FI 9      | V-40S  | -             | ZLG 308 AC       |                           |
| -    | 2,0 | 6309 C3        | 6309 C3   | FI 10     | V-45S  | ASG 6309      | ZLG 309 AA       | 16                        |
| 43,5 | -   | NU 309 EG15 C3 |           | FI 12     | V-55S  | -             | ZLG 309 AB       |                           |
| -    | -   | NJ 309 EG15 C3 |           | FI 10     | V-45S  | -             | ZLG 309 AC       |                           |
| -    | 2,0 | 6310 C3        | 6310 C3   | FI 11     | V-50S  | ASG 6310      | ZLG 310 AA       | 19                        |
| 43   | -   | NU 310 EG15 C3 |           | FI 13     | V-60S  | -             | ZLG 310 AB       |                           |
| -    | -   | NJ 310 EG15 C3 |           | FI 11     | V-50S  | -             | ZLG 310 AC       |                           |
| -    | 2,0 | 6311 C3        | 6311 C3   | FI 12     | V-55S  | ASG 6311      | ZLG 311 AA       | 25                        |
| 45   | -   | NU 311 EG15 C3 |           | FI 15     | V-65S  | -             | ZLG 311 AB       |                           |
| -    | -   | NJ 311 EG15 C3 |           | FI 12     | V-55S  | -             | ZLG 311 AC       |                           |
| -    | 1,5 | 6312 C3        | 6312 C3   | FI 13     | V-60S  | ASG 6312      | ZLG 312 AA       | 30                        |
| 46,5 | -   | NU 312 EG15 C3 |           | FI 16     | V-70S  | -             | ZLG 312 AB       |                           |
| -    | -   | NJ 312 EG15 C3 |           | FI 13     | V-60S  | -             | ZLG 312 AC       |                           |
| -    | 2,5 | 6313 C3        | 6313 C3   | FI 15     | V-65S  | ASG 6313      | ZLG 313 AA       | 33                        |
| 48   | -   | NU 313 EG15 C3 |           | FI 17     | V-75S  | -             | ZLG 313 AB       |                           |
| -    | -   | NJ 313 EG15 C3 |           | FI 15     | V-65S  | -             | ZLG 313 AC       |                           |

# Double Bearing Housings ZLG 300



## Design AB

| shaft |                | bearing housing |     |                |                |                |     |                |                |     |                |     |    |       |                |                |       |                |  |
|-------|----------------|-----------------|-----|----------------|----------------|----------------|-----|----------------|----------------|-----|----------------|-----|----|-------|----------------|----------------|-------|----------------|--|
| d     | d <sub>1</sub> | code number     | A   | A <sub>1</sub> | A <sub>2</sub> | A <sub>3</sub> | H   | H <sub>1</sub> | H <sub>2</sub> | J   | J <sub>1</sub> | L   | N  | W     | W <sub>1</sub> | W <sub>2</sub> | B     | d <sub>3</sub> |  |
| 70    | 80             | ZLG 314         | 534 | 45             | 35             | 60             | 190 | 95             | 25             | 230 | 380            | 290 | 20 | 421,0 | 364,0          | 99,0           | 92,5  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 423,5 | 366,5          |                |       | 80             |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 423,5 | 365,0          |                |       | -              |  |
| 75    | 90             | ZLG 315         | 559 | 45             | 35             | 70             | 200 | 100            | 28             | 260 | 400            | 330 | 20 | 450,0 | 389,0          | 99,0           | 95,0  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 452,5 | 391,5          |                |       | 90             |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 452,5 | 390,0          |                |       | -              |  |
| 80    | 95             | ZLG 316         | 585 | 50             | 40             | 70             | 220 | 112            | 30             | 260 | 420            | 330 | 20 | 468,0 | 405,0          | 104,0          | 98,0  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 470,5 | 407,5          |                |       | 95             |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 470,5 | 406,0          |                |       | -              |  |
| 85    | 100            | ZLG 317         | 593 | 50             | 40             | 70             | 225 | 112            | 30             | 290 | 440            | 350 | 20 | 478,0 | 415,0          | 103,0          | 92,0  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 480,5 | 417,5          |                |       | 100            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 480,5 | 416,0          |                |       | -              |  |
| 90    | 105            | ZLG 318         | 605 | 55             | 45             | 70             | 230 | 112            | 30             | 290 | 460            | 350 | 20 | 483,5 | 418,5          | 107,0          | 88,0  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 486,5 | 421,5          |                |       | 110            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 486,5 | 420,0          |                |       | 110            |  |
| 95    | 110            | ZLG 319         | 633 | 60             | 50             | 90             | 248 | 125            | 35             | 320 | 480            | 400 | 24 | 508,5 | 440,5          | 110,5          | 92,0  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 511,5 | 443,5          |                |       | 110            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 511,5 | 442,0          |                |       | 110            |  |
| 100   | 115            | ZLG 320         | 673 | 60             | 50             | 80             | 264 | 130            | 40             | 320 | 500            | 400 | 24 | 533,0 | 463,0          | 118,5          | 102,0 | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 536,5 | 466,5          |                |       | 120            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 536,5 | 465,0          |                |       | 120            |  |
| 110   | 130            | ZLG 322         | 678 | 70             | 60             | 100            | 296 | 150            | 40             | 380 | 520            | 450 | 26 | 577,0 | 504,0          | 102,5          | 96,5  | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 580,5 | 507,5          |                |       | 130            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 580,5 | 506,0          |                |       | -              |  |
| 120   | 140            | ZLG 324         | 705 | 78             | 60             | 115            | 320 | 160            | 40             | 410 | 540            | 500 | 35 | 599,5 | 521,5          | 107,5          | 100,0 | -              |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 602,5 | 524,5          |                |       | 140            |  |
|       |                |                 |     |                |                |                |     |                |                |     |                |     |    | 602,5 | 523,0          |                |       | -              |  |

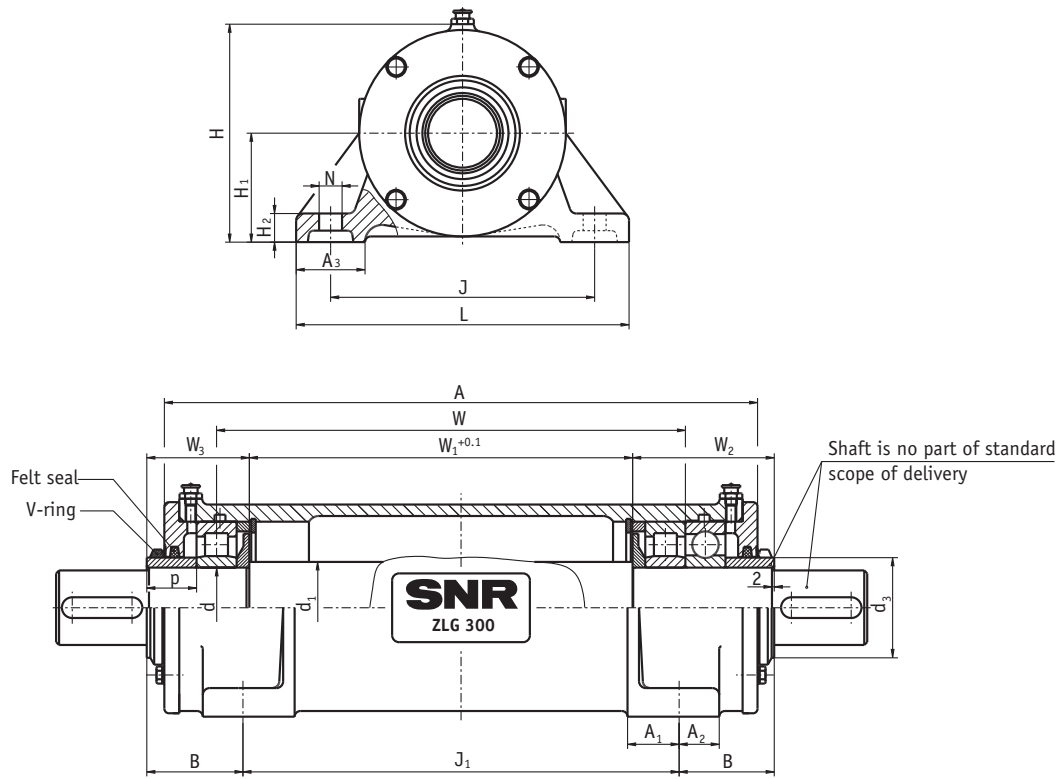


## Design AC

If you notify us the dimensions of the mating structure for your design, we will be glad to supply you with double or triple bearing housings fully mounted, pre-lubricated and with a corresponding shaft. That means that you have the advantage of getting the complete unit from one supplier only.

| p  | as  | mounting parts |           | felt ring | V-ring | spring washer | unit designation | housing weight approx. kg |
|----|-----|----------------|-----------|-----------|--------|---------------|------------------|---------------------------|
|    |     | bearing 1      | bearing 2 |           |        |               |                  |                           |
| -  | 2,5 | 6314 C3        | 6314 C3   | FI 16     | V-70S  | ASG 6314      | ZLG 314 AA       | 37                        |
| 53 | -   | NU 314 EG15 C3 |           | FI 18     | V-80S  | -             | ZLG 314 AB       |                           |
| -  | -   | NJ 314 EG15 C3 |           | FI 16     | V-70S  | -             | ZLG 314 AC       |                           |
| -  | 2,5 | 6315 C3        | 6315 C3   | FI 17     | V-75S  | ASG 6315      | ZLG 315 AA       | 47                        |
| 50 | -   | NU 315 EG15 C3 |           | FI 20     | V-90S  | -             | ZLG 315 AB       |                           |
| -  | -   | NJ 315 EG15 C3 |           | FI 17     | V-75S  | -             | ZLG 315 AC       |                           |
| -  | 2,5 | 6316 C3        | 6316 C3   | FI 18     | V-80S  | ASG 6316      | ZLG 316 AA       | 56                        |
| 53 | -   | NU 316 EG15 C3 |           | FI 21     | V-95S  | -             | ZLG 316 AB       |                           |
| -  | -   | NJ 316 EG15 C3 |           | FI 18     | V-80S  | -             | ZLG 316 AC       |                           |
| -  | 2,5 | 6317 C3        | 6317 C3   | FI 19     | V-85S  | ASG 6317      | ZLG 317 AA       | 64                        |
| 51 | -   | NU 317 EG15 C3 |           | FI 22     | V-100S | -             | ZLG 317 AB       |                           |
| -  | -   | NJ 317 EG15 C3 |           | FI 19     | V-85S  | -             | ZLG 317 AC       |                           |
| -  | 3,0 | 6318 C3        | 6318 C3   | FI 20     | V-90S  | ASG 6318      | ZLG 318 AA       | 71                        |
| 55 | -   | NU 318 EG15 C3 |           | FI 24     | V-110S | -             | ZLG 318 AB       |                           |
| -  | -   | NJ 318 EG15 C3 |           | FI 20     | V-90S  | -             | ZLG 318 AC       |                           |
| -  | 3,0 | 6319 C3        | 6319 C3   | FI 21     | V-95S  | ASG 6319      | ZLG 319 AA       | 82                        |
| 56 | -   | NU 319 EG15 C3 |           | FI 24     | V-110S | -             | ZLG 319 AB       |                           |
| -  | -   | NJ 319 EG15 C3 |           | FI 21     | V-95S  | -             | ZLG 319 AC       |                           |
| -  | 3,5 | 6320 C3        | 6320 C3   | FI 22     | V-100S | ASG 6320      | ZLG 320 AA       | 93                        |
| 62 | -   | NU 320 EG15 C3 |           | FI 27     | V-120S | -             | ZLG 320 AB       |                           |
| -  | -   | NJ 320 EG15 C3 |           | FI 22     | V-100S | -             | ZLG 320 AC       |                           |
| -  | 3,5 | 6322 C3        | 6322 C3   | FI 24     | V-110S | ASG 6322      | ZLG 322 AA       | 110                       |
| 41 | -   | NU 322 EG15 C3 |           | FI 29     | V-130S | -             | ZLG 322 AB       |                           |
| -  | -   | NJ 322 EG15 C3 |           | FI 24     | V-110S | -             | ZLG 322 AC       |                           |
| -  | 3,0 | 6324 C3        | 6324 C3   | FI 27     | V-120S | ASG 6324      | ZLG 324 AA       | 150                       |
| 41 | -   | NU 324 EG15 C3 |           | FI 32     | V-140S | -             | ZLG 324 AB       |                           |
| -  | -   | NJ 324 EG15 C3 |           | FI 27     | V-120S | -             | ZLG 324 AC       |                           |

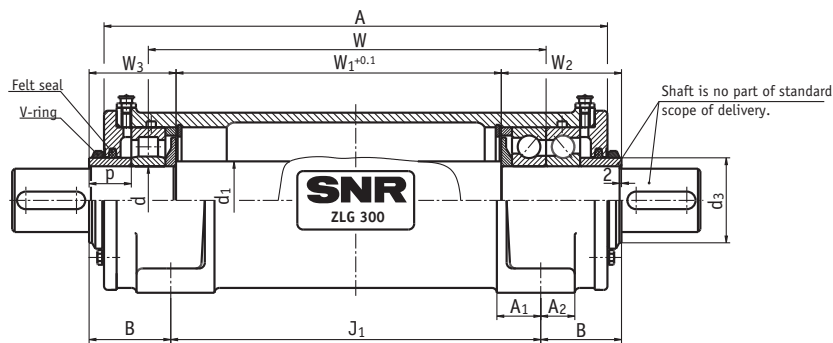
# Triple Bearing Housings DLG 300



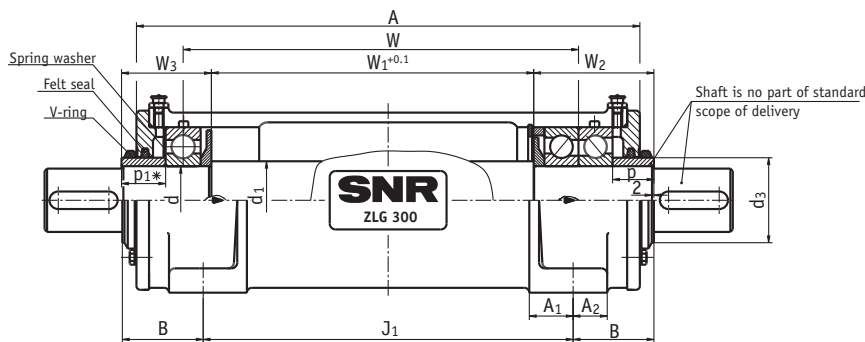
Design AD

|       |                 | dimensions [mm] |             |    |                |                |                |     |                |                |     |                |    |       |       |                |                |                |     |                |   |    |
|-------|-----------------|-----------------|-------------|----|----------------|----------------|----------------|-----|----------------|----------------|-----|----------------|----|-------|-------|----------------|----------------|----------------|-----|----------------|---|----|
| shaft | bearing housing | d <sub>1</sub>  | code number | A  | A <sub>1</sub> | A <sub>2</sub> | A <sub>3</sub> | H   | H <sub>1</sub> | H <sub>2</sub> | J   | J <sub>1</sub> | L  | N     | W     | W <sub>1</sub> | W <sub>2</sub> | W <sub>3</sub> | B   | d <sub>3</sub> | p | as |
| 70    | 80              | DLG 314         | 517         | 45 | 35             | 60             | 190            | 95  | 25             | 230            | 380 | 290            | 20 | 408,5 | 334,0 | 124,0          | 89,0           | 83,5           | 80  | 43,0           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 408,5 | 334,0 | 89,0           | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 406,0 | 331,5 | 91,5           | 2,5            | -              |     |                |   |    |
| 75    | 90              | DLG 315         | 553         | 45 | 35             | 70             | 200            | 100 | 28             | 260            | 400 | 330            | 20 | 438,5 | 359,0 | 130,5          | 93,5           | 91,5           | 90  | 44,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 438,5 | 359,0 | 93,5           | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 436,0 | 356,5 | 96,0           | 2,5            | -              |     |                |   |    |
| 80    | 95              | DLG 316         | 577         | 50 | 40             | 70             | 220            | 112 | 30             | 260            | 420 | 330            | 20 | 460,0 | 377,5 | 134,5          | 95,5           | 94,0           | 95  | 44,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 460,0 | 377,5 | 95,5           | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 457,5 | 375,0 | 98,0           | 2,5            | -              |     |                |   |    |
| 85    | 100             | DLG 317         | 593         | 50 | 40             | 70             | 225            | 112 | 30             | 290            | 440 | 350            | 20 | 469,0 | 385,5 | 139,5          | 98,5           | 92,0           | 100 | 46,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 469,0 | 385,5 | 98,5           | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 466,5 | 383,0 | 101,0          | 2,5            | -              |     |                |   |    |
| 90    | 105             | DLG 318         | 599         | 55 | 45             | 70             | 230            | 112 | 30             | 290            | 460 | 350            | 20 | 474,0 | 387,5 | 144,5          | 101,5          | 87,0           | 110 | 47,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 474,0 | 387,5 | 101,5          | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 471,0 | 384,5 | 104,5          | 3,0            | -              |     |                |   |    |
| 95    | 110             | DLG 319         | 626         | 60 | 50             | 90             | 248            | 125 | 35             | 320            | 480 | 400            | 24 | 498,0 | 407,5 | 149,0          | 104,0          | 90,5           | 110 | 47,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 498,0 | 407,5 | 104,0          | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 495,0 | 404,5 | 107,0          | 3,0            | -              |     |                |   |    |
| 100   | 115             | DLG 320         | 657         | 60 | 50             | 80             | 264            | 130 | 40             | 320            | 500 | 400            | 24 | 525,5 | 432,0 | 153,0          | 106,0          | 95,5           | 120 | 47,5           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 525,5 | 432,0 | 106,0          | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 522,0 | 428,5 | 109,5          | 3,5            | -              |     |                |   |    |
| 110   | 130             | DLG 322         | 678         | 70 | 60             | 100            | 296            | 150 | 40             | 380            | 520 | 450            | 26 | 555,5 | 457,5 | 152,5          | 102,5          | 96,5           | 130 | 41,0           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 555,5 | 457,5 | 102,5          | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 552,0 | 454,0 | 106,0          | 3,5            | -              |     |                |   |    |
| 120   | 140             | DLG 324         | 705         | 78 | 60             | 115            | 320            | 160 | 40             | 410            | 540 | 500            | 35 | 575,0 | 469,5 | 162,5          | 107,5          | 100,0          | 140 | 41,0           | - | -  |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 575,0 | 469,5 | 107,5          | -              | -              |     |                |   |    |
|       |                 |                 |             |    |                |                |                |     |                |                |     |                |    | 572,0 | 466,5 | 110,5          | 3,0            | -              |     |                |   |    |





Design AE



Design AF

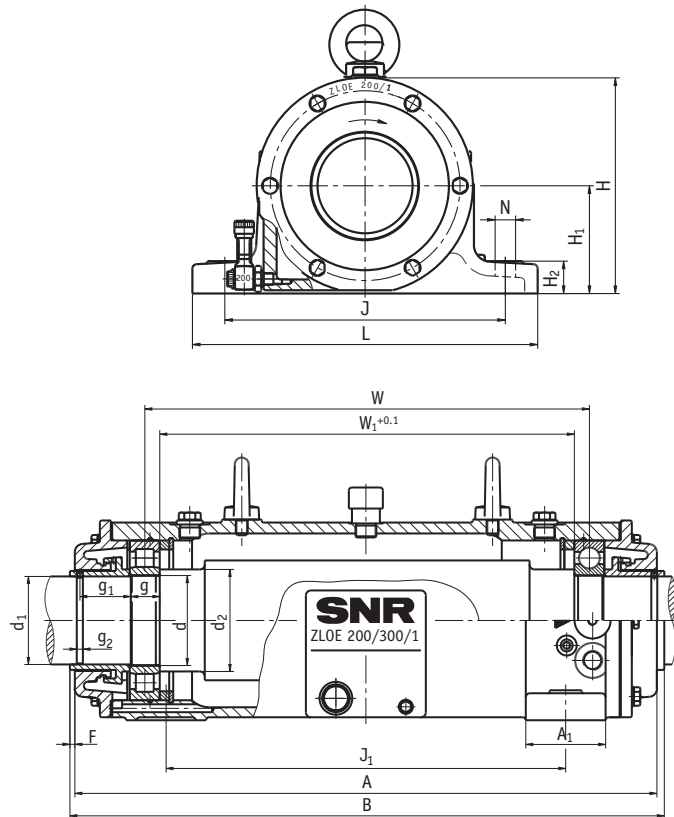
\*  $p_1 = p + as$

If you notify us the dimensions of the mating structure for your design, we will be glad to supply you with double or triple bearing housings fully mounted, pre-lubricated and with a corresponding shaft. That means that you have the advantage of getting the complete unit from one supplier only.

| mounting parts |                          |           |        |               |            | unit designation | housing weight approx. kg |
|----------------|--------------------------|-----------|--------|---------------|------------|------------------|---------------------------|
| bearing 1      | bearing 2                | felt ring | V-ring | spring washer |            |                  |                           |
| NU 314 EG15 C3 | NU 314 EG15 C3 + 6314 C3 | FI 18     | V-80S  | -             | DLG 314 AD | 37               |                           |
| NU 314 EG15 C3 | 2 x 7314 BG              |           |        | -             | DLG 314 AE |                  |                           |
| 6314 C3        | 2 x 7314 BG              |           |        | ASG 6314      | DLG 314 AF |                  |                           |
| NU 315 EG15 C3 | NU 315 EG15 C3 + 6315 C3 | FI 20     | V-90S  | -             | DLG 315 AD | 47               |                           |
| NU 315 EG15 C3 | 2 x 7315 BG              |           |        | -             | DLG 315 AE |                  |                           |
| 6315 C3        | 2 x 7315 BG              |           |        | ASG 6315      | DLG 315 AF |                  |                           |
| NU 316 EG15 C3 | NU 316 EG15 C3 + 6316 C3 | FI 21     | V-95S  | -             | DLG 316 AD | 56               |                           |
| NU 316 EG15 C3 | 2 x 7316 BG              |           |        | -             | DLG 316 AE |                  |                           |
| 6316 C3        | 2 x 7316 BG              |           |        | ASG 6316      | DLG 316 AF |                  |                           |
| NU 317 EG15 C3 | NU 317 EG15 C3 + 6317 C3 | FI 22     | V-100S | -             | DLG 317 AD | 64               |                           |
| NU 317 EG15 C3 | 2 x 7317 BG              |           |        | -             | DLG 317 AE |                  |                           |
| 6317 C3        | 2 x 7317 BG              |           |        | ASG 6317      | DLG 317 AF |                  |                           |
| NU 318 EG15 C3 | NU 318 EG15 C3 + 6318 C3 | FI 24     | V-110S | -             | DLG 318 AD | 71               |                           |
| NU 318 EG15 C3 | 2 x 7318 BG              |           |        | -             | DLG 318 AE |                  |                           |
| 6318 C3        | 2 x 7318 BG              |           |        | ASG 6318      | DLG 318 AF |                  |                           |
| NU 319 EG15 C3 | NU 319 EG15 C3 + 6319 C3 | FI 24     | V-110S | -             | DLG 319 AD | 82               |                           |
| NU 319 EG15 C3 | 2 x 7319 BG              |           |        | -             | DLG 319 AE |                  |                           |
| 6319 C3        | 2 x 7319 BG              |           |        | ASG 6319      | DLG 319 AF |                  |                           |
| NU 320 EG15 C3 | NU 320 EG15 C3 + 6320 C3 | FI 27     | V-120S | -             | DLG 320 AD | 93               |                           |
| NU 320 EG15 C3 | 2 x 7320 BG              |           |        | -             | DLG 320 AE |                  |                           |
| 6320 C3        | 2 x 7320 BG              |           |        | ASG 6320      | DLG 320 AF |                  |                           |
| NU 322 EG15 C3 | NU 322 EG15 C3 + 6322 C3 | FI 29     | V-130S | -             | DLG 322 AD | 110              |                           |
| NU 322 EG15 C3 | 2 x 7322 BG              |           |        | -             | DLG 322 AE |                  |                           |
| 6322 C3        | 2 x 7322 BG              |           |        | ASG 6322      | DLG 322 AF |                  |                           |
| NU 324 EG15 C3 | NU 324 EG15 C3 + 6324 C3 | FI 32     | V-140S | -             | DLG 324 AD | 150              |                           |
| NU 324 EG15 C3 | 2 x 7324 BG              |           |        | -             | DLG 324 AE |                  |                           |
| 6324 C3        | 2 x 7324 BG              |           |        | ASG 6324      | DLG 324 AF |                  |                           |

# Double Bearing Housings ZLOE 200/300

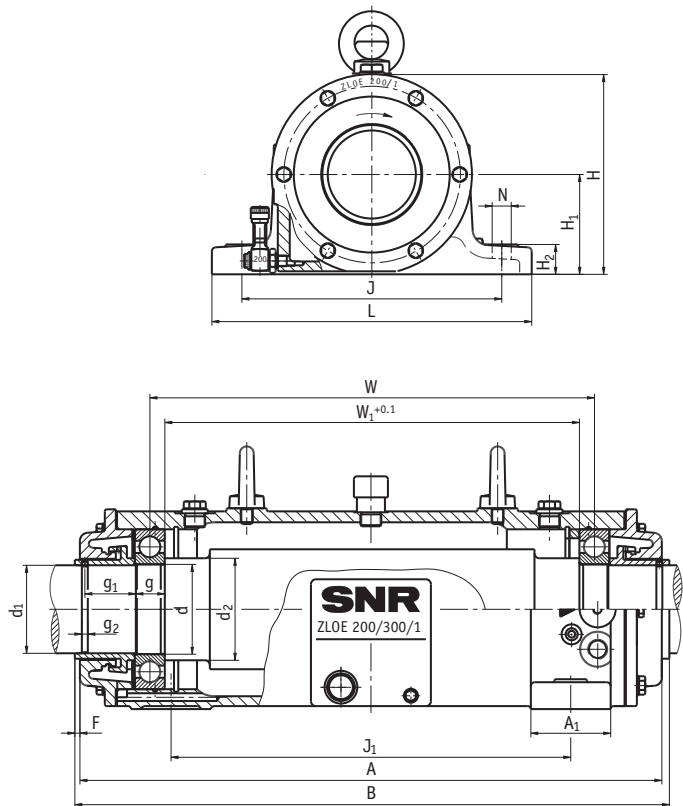
for cylindrical roller bearings and deep groove ball bearings, specified for oil lubrication



Design B

| shaft |                | dimensions [mm] |                             |       |                |       |    |     |                |                |     |                |     |    |       |                |  |
|-------|----------------|-----------------|-----------------------------|-------|----------------|-------|----|-----|----------------|----------------|-----|----------------|-----|----|-------|----------------|--|
| d     | d <sub>1</sub> | d <sub>2</sub>  | bearing housing code number | A     | A <sub>1</sub> | B     | F  | H   | H <sub>1</sub> | H <sub>2</sub> | J   | J <sub>1</sub> | L   | N  | W     | W <sub>1</sub> |  |
| 90    | 88             | 102             | ZLOE 218/1                  | 582,5 | 80             | 595,0 | 5  | 200 | 100            | 30             | 260 | 400            | 320 | 19 | 445,0 | 415,0          |  |
| 95    | 93             | 110             | ZLOE 219/1                  | 645,0 | 80             | 657,5 | 5  | 227 | 112            | 30             | 290 | 440            | 350 | 19 | 493,5 | 461,5          |  |
| 100   | 98             | 115             | ZLOE 220/1                  | 645,0 | 80             | 657,5 | 5  | 227 | 112            | 30             | 290 | 440            | 350 | 19 | 491,5 | 457,5          |  |
| 110   | 108            | 122             | ZLOE 222/1                  | 688,5 | 90             | 715,5 | 12 | 254 | 125            | 36             | 320 | 480            | 400 | 24 | 536,5 | 498,5          |  |
| 75    | 72             | 90              | ZLOE 315/1                  | 582,5 | 80             | 595,0 | 5  | 200 | 100            | 30             | 260 | 400            | 320 | 19 | 445,0 | 408,0          |  |
| 85    | 82             | 100             | ZLOE 317/1                  | 645,0 | 80             | 657,5 | 5  | 227 | 112            | 30             | 290 | 440            | 350 | 19 | 491,5 | 450,5          |  |
| 95    | 92             | 110             | ZLOE 319/1                  | 688,5 | 90             | 715,5 | 12 | 254 | 125            | 36             | 320 | 480            | 400 | 24 | 536,5 | 491,5          |  |

This bearing housing can be equipped with a combination of three bearings. Please contact SNR for more informations.



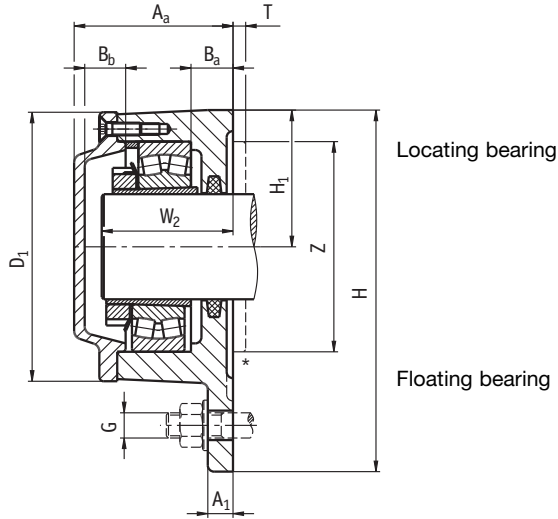
We will also be glad to supply you with ZLOE double bearing housings as complete unit with shaft. Provided that you notify us of the dimensions of your mating structure.

## Design A

| g  | g <sub>1</sub> | g <sub>2</sub> | mounting parts |           | oil level in operation [mm] | oil quantity approx. l | weight approx. kg | unit designation |
|----|----------------|----------------|----------------|-----------|-----------------------------|------------------------|-------------------|------------------|
|    |                |                | bearing 1      | bearing 2 |                             |                        |                   |                  |
| 28 | 52,0           | 6              | 6218 C3        | 6218 C3   | 32 - 36                     | 0,8                    | 75                | ZLOE 218/1 A     |
|    |                |                | NU 218 C3      | 6218 C3   |                             |                        |                   | ZLOE 218/1 B     |
| 30 | 60,0           | 6              | 6219 C3        | 6219 C3   | 39 - 44                     | 1,3                    | 80                | ZLOE 219/1 A     |
|    |                |                | NU 219 C3      | 6219 C3   |                             |                        |                   | ZLOE 219/1 B     |
| 32 | 58,0           | 6              | 6220 C3        | 6220 C3   | 36 - 41                     | 1,3                    | 80                | ZLOE 220/1 A     |
|    |                |                | NU 220 C3      | 6220 C3   |                             |                        |                   | ZLOE 220/1 B     |
| 36 | 58,0           | 6              | 6222 C3        | 6222 C3   | 40 - 45                     | 1,7                    | 85                | ZLOE 222/1 A     |
|    |                |                | NU 222 C3      | 6222 C3   |                             |                        |                   | ZLOE 222/1 B     |
| 35 | 49,5           | 6              | 6315 C3        | 6315 C3   | 34,5 - 37,5                 | 0,8                    | 75                | ZLOE 315/1 A     |
|    |                |                | NU 315 C3      | 6315 C3   |                             |                        |                   | ZLOE 315/1 B     |
| 39 | 54,5           | 6              | 6317 C3        | 6317 C3   | 39 - 43                     | 1,3                    | 80                | ZLOE 317/1 A     |
|    |                |                | NU 317 C3      | 6317 C3   |                             |                        |                   | ZLOE 317/1 B     |
| 43 | 54,5           | 6              | 6319 C3        | 6319 C3   | 43 - 46                     | 1,8                    | 85                | ZLOE 319/1 A     |
|    |                |                | NU 319 C3      | 6319 C3   |                             |                        |                   | ZLOE 319/1 B     |

# Flange Bearing Housings 722500

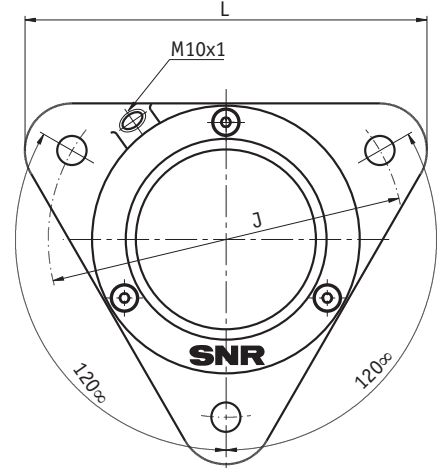
for bearings with adapter sleeve fastening



Locating bearing

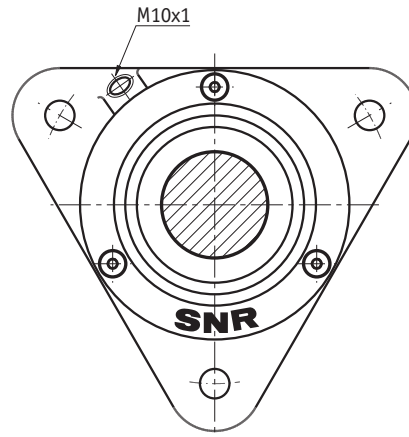
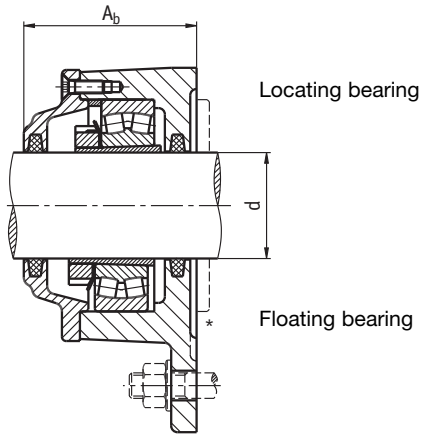
Floating bearing

Design A  
Housing design for shaft ends



| shaft<br>d | bearing housing<br>code number | dimensions [mm] |       |       |       |       |       |     |       |     |     |       |       |       |
|------------|--------------------------------|-----------------|-------|-------|-------|-------|-------|-----|-------|-----|-----|-------|-------|-------|
|            |                                | $A_a$           | $A_b$ | $A_1$ | $B_a$ | $B_b$ | $D_1$ | H   | $H_1$ | J   | L   | $W_2$ | $T^*$ | $Z^*$ |
| 20         | 722505 DA                      | 51,5            | 56,5  | 10    | 15    | 12,5  | 75    | 100 | 38    | 96  | 110 | 44    | 6     | 65    |
|            | 722505 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 25         | 722506 DA                      | 57,0            | 59,5  | 12    | 16    | 15    | 86    | 117 | 44    | 116 | 130 | 47    | 6     | 70    |
|            | 722506 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 30         | 722507 DA                      | 59,5            | 63,5  | 12    | 16    | 14,5  | 97    | 130 | 48,5  | 130 | 145 | 51    | 6     | 75    |
|            | 722507 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 35         | 722508 DA                      | 64,0            | 65,5  | 12    | 17    | 18    | 108   | 143 | 54    | 140 | 160 | 53    | 6     | 80    |
|            | 722508 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 40         | 722509 DA                      | 64,5            | 69,5  | 12    | 19    | 16,5  | 113   | 160 | 60    | 160 | 180 | 56    | 6     | 85    |
|            | 722509 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 45         | 722510 DA                      | 68,5            | 73    | 12    | 22    | 17,5  | 118   | 160 | 60    | 160 | 180 | 60    | 6     | 90    |
|            | 722510 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 50         | 722511 DA                      | 75,5            | 81,5  | 12    | 24    | 19,5  | 128   | 172 | 65    | 170 | 192 | 64    | 6     | 100   |
|            | 722511 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 55         | 722512 DA                      | 77,0            | 82    | 12    | 23    | 19    | 142   | 189 | 72    | 180 | 210 | 66    | 10    | 110   |
|            | 722512 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |
| 60         | 722513 DA                      | 80              | 86    | 15    | 22    | 20    | 152   | 203 | 78    | 190 | 225 | 69    | 10    | 120   |
|            | 722513 DB                      | -               | -     | -     | -     | -     | -     | -   | -     | -   | -   | -     | -     | -     |

\* Housings are also available with centring on the mating surface.



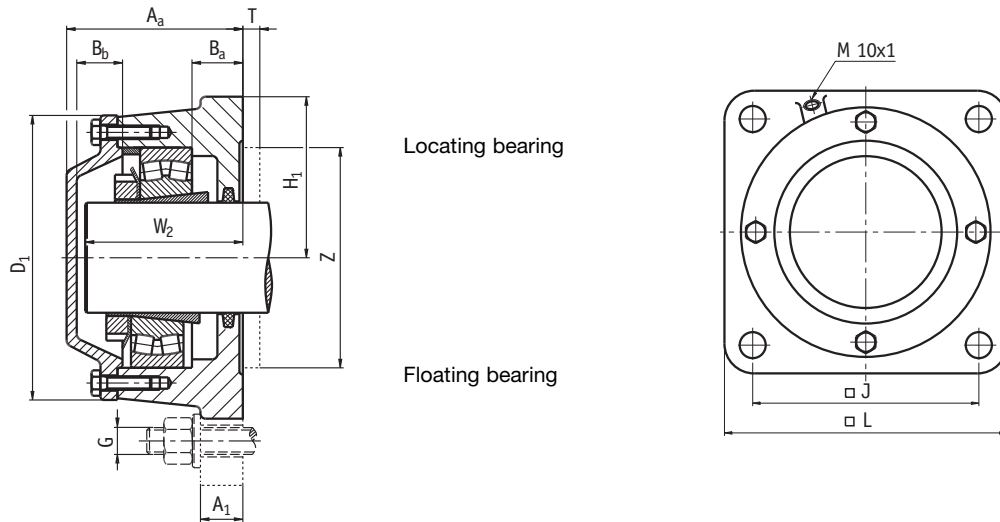
Design B  
Housing for through shafts

| fastening<br>G | weight<br>approx. kg | suitable<br>bearing | mounting parts     |                          |                | code<br>number | cover bolts *1<br>DIN 7991 | felt strips<br>DIN 5419 F2 | housing<br>design |
|----------------|----------------------|---------------------|--------------------|--------------------------|----------------|----------------|----------------------------|----------------------------|-------------------|
|                |                      |                     | adaptor<br>sleeves | locating rings<br>number | code<br>number |                |                            |                            |                   |
| M10            | 1,1                  | 1205 K C3           | H 205              | 1                        | FR 52/5        | M 5 x 16       | FS 5 x 4 x 95              |                            |                   |
|                |                      | 2205 K C3           | H 305              | 1                        | FR 52/2        |                |                            |                            |                   |
| M10            | 1,5                  | 1206 K C3           | H 206              | 1                        | FR 62/6        | M 5 x 16       | FS 6 x 5 x 118             |                            |                   |
|                |                      | 2206 K C3           | H 306              | 1                        | FR 62/2        |                |                            |                            |                   |
| M12            | 1,8                  | 1207 K C3           | H 207              | 1                        | FR 72/8        | M 5 x 16       | FS 6 x 5 x 132             |                            |                   |
|                |                      | 2207 K C3           | H 307              | 1                        | FR 72/2        |                |                            |                            |                   |
|                |                      | 22207 K             | H 307              | 1                        | FR 72/2        |                |                            |                            |                   |
| M12            | 2,3                  | 1208 K C3           | H 208              | 1                        | FR 80/7        | M 5 x 16       | FS 6 x 5 x 150             |                            |                   |
|                |                      | 2208 K C3           | H 308              | 1                        | FR 80/2        |                |                            |                            |                   |
|                |                      | 22208 K             | H 308              | 1                        | FR 80/2        |                |                            |                            |                   |
| M12            | 3,0                  | 1209 K C3           | H 209              | 1                        | FR 85/6        | M 6 x 20       | FS 6 x 5 x 165             |                            |                   |
|                |                      | 2209 K C3           | H 309              | 1                        | FR 85/2        |                |                            |                            |                   |
|                |                      | 22209 K             | H 309              | 1                        | FR 85/2        |                |                            |                            |                   |
| M12            | 3,0                  | 1210 K C3           | H 210              | 1                        | FR 90/5        | M 6 x 20       | FS 6 x 5 x 180             |                            |                   |
|                |                      | 2210 K C3           | H 310              | 1                        | FR 90/2        |                |                            |                            |                   |
|                |                      | 22210 K             | H 310              | 1                        | FR 90/2        |                |                            |                            |                   |
| M12            | 4,1                  | 1211 K C3           | H 211              | 1                        | FR 100/6       | M 6 x 20       | FS 8 x 6,5 x 210           |                            |                   |
|                |                      | 2211 K C3           | H 311              | 1                        | FR 100/2       |                |                            |                            |                   |
|                |                      | 22211 K             | H 311              | 1                        | FR 100/2       |                |                            |                            |                   |
| M12            | 4,8                  | 1212 K C3           | H 212              | 1                        | FR 110/8       | M 6 x 20       | FS 8 x 6,5 x 225           |                            |                   |
|                |                      | 2212 K C3           | H 312              | 1                        | FR 110/2       |                |                            |                            |                   |
|                |                      | 22212 K             | H 312              | 1                        | FR 110/2       |                |                            |                            |                   |
| M12            | 5,9                  | 1213 K C3           | H 213              | 1                        | FR 120/10      | M 6 x 20       | FS 8 x 6,5 x 240           |                            |                   |
|                |                      | 2213 K C3           | H 313              | 1                        | FR 120/2       |                |                            |                            |                   |
|                |                      | 22213 K             | H 313              | 1                        | FR 120/2       |                |                            |                            |                   |

\*1 to 722513: 3 screws  
ex 722515: 4 screws

# Flange Bearing Housings 722500

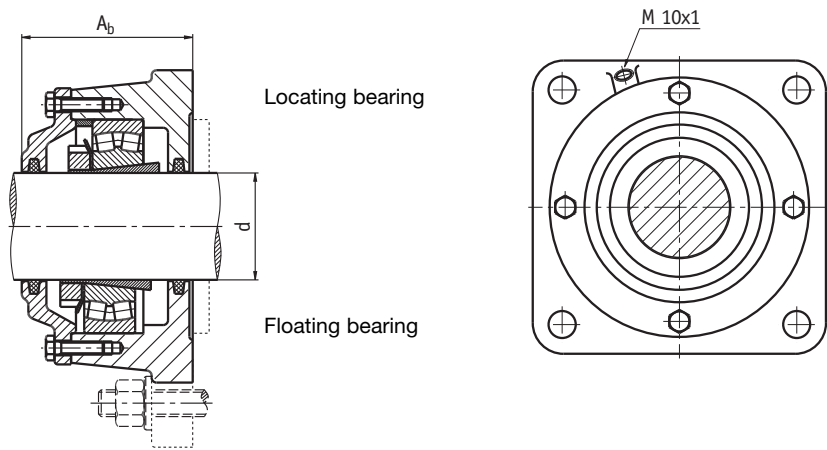
for bearings with adapter sleeve fastening



Design A  
Housing design for shaft ends

| shaft<br>d | bearing housing<br>code number | dimensions [mm] |                |                |                |                |                |   |                |     |     |                |    |     |
|------------|--------------------------------|-----------------|----------------|----------------|----------------|----------------|----------------|---|----------------|-----|-----|----------------|----|-----|
|            |                                | A <sub>a</sub>  | A <sub>b</sub> | A <sub>1</sub> | B <sub>a</sub> | B <sub>b</sub> | D <sub>1</sub> | H | H <sub>1</sub> | J   | L   | W <sub>2</sub> | T* | Z*  |
| 65         | 722515 A                       | 104             | 104            | 25             | 30             | 27             | 168            | - | 95             | 152 | 190 | 86             | 10 | 130 |
|            | 722515 B                       |                 |                |                |                | -              |                |   |                |     |     | -              |    |     |
| 70         | 722516 A                       | 110             | 110            | 25             | 31             | 30             | 176            | - | 98             | 152 | 196 | 92             | 10 | 130 |
|            | 722516 B                       |                 |                |                |                | -              |                |   |                |     | -   |                |    |     |
| 75         | 722517 A                       | 114             | 114            | 25             | 31             | 30             | 188            | - | 105            | 170 | 210 | 96             | 10 | 140 |
|            | 722517 B                       |                 |                |                |                | -              |                |   |                |     | -   |                |    |     |
| 80         | 722518 A                       | 118             | 118            | 25             | 30             | 34             | 198            | - | 105            | 170 | 210 | 99             | 10 | 150 |
|            | 722518 B                       |                 |                |                |                | -              |                |   |                |     | -   |                |    |     |
| 90         | 722520 A                       | 127             | 127            | 30             | 30             | 35             | 224            | - | 125            | 198 | 250 | 107            | 10 | 170 |
|            | 722520 B                       |                 |                |                |                | -              |                |   |                |     |     |                |    |     |
| 100        | 722522 A                       | 137             | 137            | 30             | 30             | 38             | 246            | - | 135            | 219 | 270 | 115            | 10 | 200 |
|            | 722522 B                       |                 |                |                |                | -              |                |   |                |     | -   |                |    |     |

\* Housings are also available with centring on the mating surface.



Design B  
Housing for through shafts

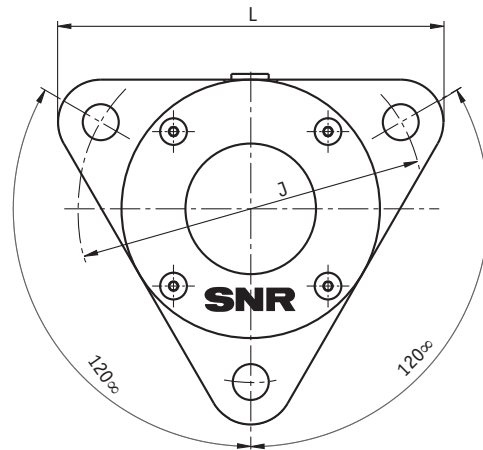
| fastening<br>G | weight<br>approx. kg | suitable<br>bearing | mounting parts     |                          | code<br>number     | cover bolts *1<br>DIN 7991 | felt strips<br>DIN 5419 F2 | housing<br>design |
|----------------|----------------------|---------------------|--------------------|--------------------------|--------------------|----------------------------|----------------------------|-------------------|
|                |                      |                     | adapter<br>sleeves | locating rings<br>number |                    |                            |                            |                   |
| M16            | 9,4                  | 1215 K C3           | H 215              | 2                        | FR 130/8           | M 8 x 25                   | FS 8 x 6,5 x 260           |                   |
|                |                      | 2215 K C3           | H 315              | 1                        | FR 130/10          |                            |                            |                   |
|                |                      | 22215 K             | H 315              | 1                        | FR 130/10          |                            |                            |                   |
| M 16           | 9,8                  | 1216 K C3           | H 216              | 2                        | FR 140/8,5         | M 8 x 25                   | FS 9 x 7,5 x 280           |                   |
|                |                      | 2216 K C3           | H 316              | 1                        | FR 140/10          |                            |                            |                   |
|                |                      | 22216 K             | H 316              | 1                        | FR 140/10          |                            |                            |                   |
| M 16           | 11,5                 | 1217 K C3           | H 217              | 2                        | FR 150/9           | M 8 x 25                   | FS 9 x 7,5 x 300           |                   |
|                |                      | 2217 K C3           | H 317              | 1                        | FR 150/10          |                            |                            |                   |
|                |                      | 22217 K             | H 317              | 1                        | FR 150/10          |                            |                            |                   |
| M 16           | 12,5                 | 1218 K C3           | H 218              | 2                        | FR 160/10          | M 8 x 25                   | FS 9 x 7,5 x 315           |                   |
|                |                      | 2218 K C3           | H 318              | 1                        | FR 160/10          |                            |                            |                   |
|                |                      | 22218 K             | H 318              | 1                        | FR 160/10          |                            |                            |                   |
| M 20           | 18,0                 | 1220 K C3           | H 220              | je 1                     | FR180/10+FR 180/12 | M10 x 30                   | FS10 x 8,5 x 350           |                   |
|                |                      | 2220 K C3           | H 320              | 1                        | FR 180/10          |                            |                            |                   |
|                |                      | 22220 K             | H 320              | 1                        | FR 180/10          |                            |                            |                   |
| M 20           | 21,5                 | 1222 K C3           | H 222              | 2                        | FR 200/12,5        | M 10 x 30                  | FS 12 x 10 x 390           |                   |
|                |                      | 2222 K C3           | H 322              | 1                        | FR 200/10          |                            |                            |                   |
|                |                      | 22222 K             | H 322              | 1                        | FR 200/10          |                            |                            |                   |

\*1 to 722513: 3 screws  
ex 722515: 4 screws

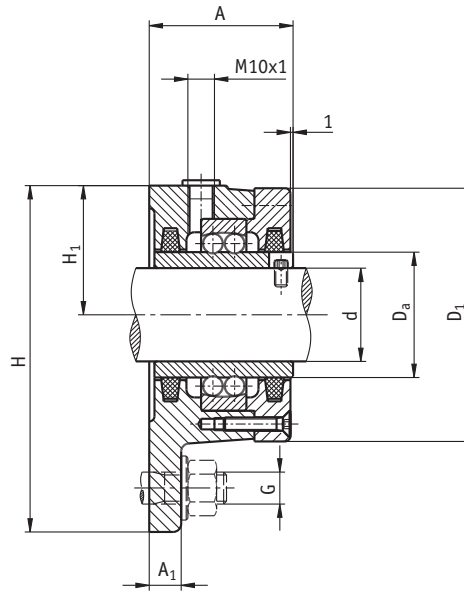


# Flange Bearing Housings F 11200

for self-aligning ball bearings with widened inner ring



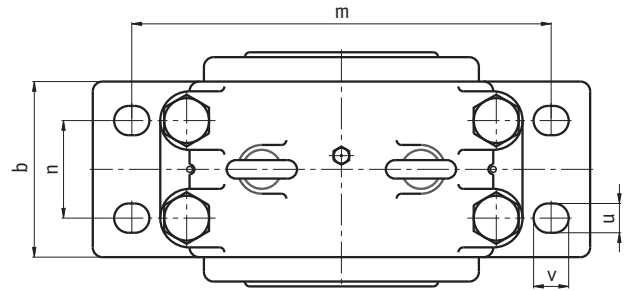
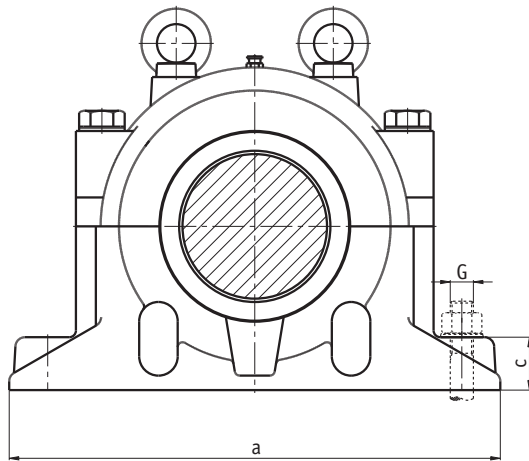
|                |                                | dimensions [mm] |       |       |       |     |       |     |     |
|----------------|--------------------------------|-----------------|-------|-------|-------|-----|-------|-----|-----|
| shaft<br>$d_1$ | bearing housing<br>code number | A               | $A_1$ | $D_a$ | $D_1$ | H   | $H_1$ | J   | L   |
| 20             | F 11204                        | 42              | 10    | 29,2  | 67    | 93  | 35,0  | 90  | 105 |
| 25             | F 11205                        | 46              | 10    | 33,3  | 73    | 100 | 38,0  | 96  | 110 |
| 30             | F 11206                        | 50              | 12    | 40,1  | 84    | 117 | 44,0  | 116 | 130 |
| 35             | F 11207                        | 54              | 12    | 47,7  | 95    | 130 | 48,5  | 130 | 145 |
| 40             | F 11208                        | 60              | 12    | 54,0  | 105   | 143 | 54,0  | 140 | 160 |
| 45             | F 11209                        | 62              | 15    | 57,7  | 115   | 160 | 60,0  | 160 | 180 |
| 50             | F 11210                        | 63              | 15    | 62,7  | 115   | 160 | 60,0  | 160 | 180 |



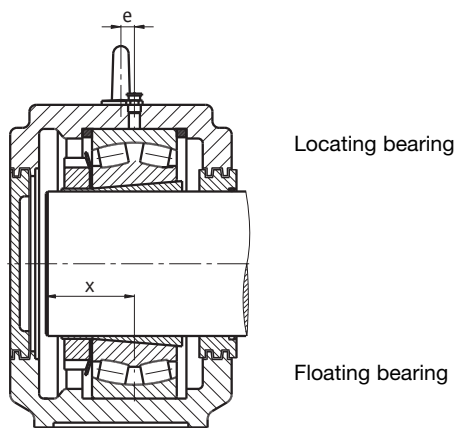
| fastening<br>G | weight<br>approx. kg | suitable bearing | cover bolts<br>4 per housing<br>DIN 7991 | felt strips<br>2 per housing<br>DIN 5419 F2 |
|----------------|----------------------|------------------|--|---|
| M10            | 0,8                  | 11204            | M 5 x 20                                 | FS 6 x 5 x 132                              |
| M10            | 1,0                  | 11205            | M 5 x 20                                 | FS 6 x 5 x 150                              |
| M10            | 1,4                  | 11206            | M 5 x 25                                 | FS 6 x 5 x 165                              |
| M12            | 1,8                  | 11207            | M 5 x 25                                 | FS 8 x 6,5 x 190                            |
| M12            | 2,3                  | 11208            | M 5 x 30                                 | FS 8 x 6,5 x 225                            |
| M12            | 3,3                  | 11209            | M 6 x 30                                 | FS 8 x 6,5 x 235                            |
| M12            | 3,6                  | 11210            | M 6 x 30                                 | FS 8 x 6,5 x 260                            |

# Plummer Block Housings SD 3100 TS

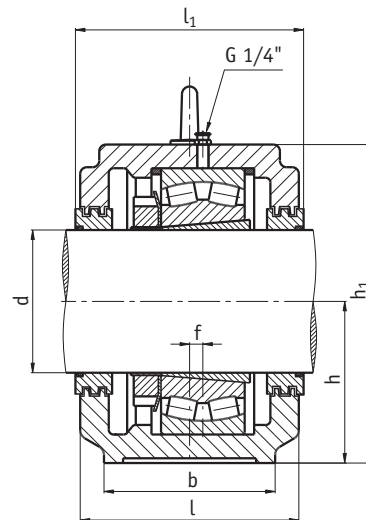
for bearing with adapter sleeve fastening



|       |                 | dimensions [mm] |     |     |    |    |     |                |     |                |     |     |    |    |  |
|-------|-----------------|-----------------|-----|-----|----|----|-----|----------------|-----|----------------|-----|-----|----|----|--|
| shaft | bearing housing | a               | b   | c   | e  | f  | h   | h <sub>1</sub> | l   | l <sub>1</sub> | m   | n   | u  | v  |  |
| 150   | SD 3134 TSA     | 510             | 180 | 70  | 14 | 14 | 170 | 335            | 230 | -              | 430 | 100 | 30 | 36 |  |
|       | SD 3134 TSB     |                 |     |     |    |    |     |                |     | 232            |     |     |    |    |  |
| 160   | SD 3136 TSA     | 530             | 190 | 75  | 15 | 15 | 180 | 355            | 240 | -              | 450 | 110 | 30 | 42 |  |
|       | SD 3136 TSB     |                 |     |     |    |    |     |                |     | 242            |     |     |    |    |  |
| 170   | SD 3138 TSA     | 560             | 210 | 80  | 10 | 10 | 190 | 375            | 260 | -              | 480 | 120 | 30 | 42 |  |
|       | SD 3138 TSB     |                 |     |     |    |    |     |                |     | 362            |     |     |    |    |  |
| 180   | SD 3140 TSA     | 610             | 230 | 85  | 10 | 10 | 210 | 410            | 280 | -              | 510 | 130 | 37 | 51 |  |
|       | SD 3140 TSB     |                 |     |     |    |    |     |                |     | 282            |     |     |    |    |  |
| 200   | SD 3144 TSAF    | 640             | 240 | 90  | 12 | 12 | 220 | 435            | 290 | -              | 540 | 140 | 37 | 51 |  |
|       | SD 3144 TSAL    |                 |     |     |    |    |     |                |     | -              |     |     |    |    |  |
|       | SD 3144 TSBF    |                 |     |     |    |    |     |                |     | 292            |     |     |    |    |  |
|       | SD 3144 TSBL    |                 |     |     |    |    |     |                |     | 292            |     |     |    |    |  |
| 220   | SD 3148 TSAF    | 700             | 260 | 95  | 12 | 12 | 240 | 475            | 310 | -              | 600 | 150 | 37 | 51 |  |
|       | SD 3148 TSAL    |                 |     |     |    |    |     |                |     | -              |     |     |    |    |  |
|       | SD 3148 TSBF    |                 |     |     |    |    |     |                |     | 312            |     |     |    |    |  |
|       | SD 3148 TSBL    |                 |     |     |    |    |     |                |     | 312            |     |     |    |    |  |
| 240   | SD 3152 TSAF    | 770             | 280 | 100 | 13 | 13 | 260 | 515            | 320 | -              | 650 | 160 | 43 | 60 |  |
|       | SD 3152 TSAL    |                 |     |     |    |    |     |                |     | -              |     |     |    |    |  |
|       | SD 3152 TSBF    |                 |     |     |    |    |     |                |     | 322            |     |     |    |    |  |
|       | SD 3152 TSBL    |                 |     |     |    |    |     |                |     | 322            |     |     |    |    |  |
| 260   | SD 3156 TSAF    | 790             | 280 | 105 | 16 | 16 | 280 | 550            | 320 | -              | 670 | 160 | 43 | 60 |  |
|       | SD 3156 TSAL    |                 |     |     |    |    |     |                |     | -              |     |     |    |    |  |
|       | SD 3156 TSBF    |                 |     |     |    |    |     |                |     | 322            |     |     |    |    |  |
|       | SD 3156 TSBL    |                 |     |     |    |    |     |                |     | 322            |     |     |    |    |  |
| 280   | SD 3160 TSAF    | 830             | 310 | 110 | 22 | 22 | 300 | 590            | 350 | -              | 710 | 190 | 43 | 60 |  |
|       | SD 3160 TSAL    |                 |     |     |    |    |     |                |     | -              |     |     |    |    |  |
|       | SD 3160 TSBF    |                 |     |     |    |    |     |                |     | 352            |     |     |    |    |  |
|       | SD 3160 TSBL    |                 |     |     |    |    |     |                |     | 352            |     |     |    |    |  |



Design A  
Housing for shaft ends



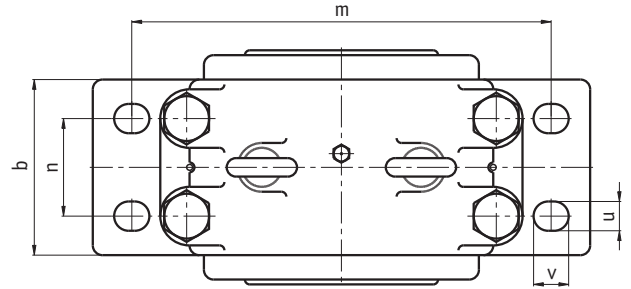
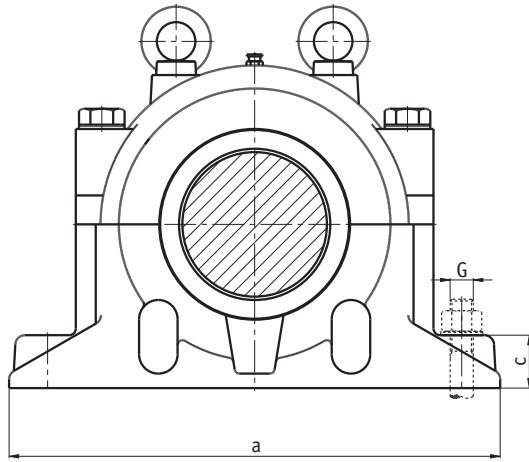
Design B  
Housing for through shafts

| fastening and mounting<br>G | X   | housing weight<br>ca. kg | suitable bearing | bearing housing equipment |                      |             |                      | grease quantity* [kg] |
|-----------------------------|-----|--------------------------|------------------|---------------------------|----------------------|-------------|----------------------|-----------------------|
|                             |     |                          |                  | Adapter sleeve            | locating ring number | Code number | labyrinth ring cover |                       |
| M 24                        | 65  | 70                       | 23134 K          | H 3134                    | 2                    | FR 280/10   | TS 34 TSA 34         | 1,8                   |
| M 24                        | 68  | 72                       | 23136 K          | H 3136                    |                      | FR 300/10   | TS 36 TSA 36         | 2,0                   |
| M 24                        | 80  | 88                       | 23138 K          | H 3138                    | 2                    | FR 320/10   | TS 38 TSA 38         | 2,7                   |
| M 30                        | 82  | 122                      | 23140 K          | H 3140                    | 2                    | FR 340/10   | TS 40 TSA 40         | 3,5                   |
| M 30                        | 90  | 136                      | 23144 K          | H 3144                    | 2                    | FR 370/10   | TS 44 TSA 44         | 4,2                   |
| M 30                        | 100 | 190                      | 23148 K          | H 3148                    | 2                    | FR 400/10   | TS 48 TSA 48         | 5,2                   |
| M 36                        | 105 | 238                      | 23152 K          | H 3152                    | 2                    | FR 440/10   | TS 52 TSA 52         | 6,6                   |
| M 36                        | 105 | 252                      | 23156 K          | H 3156                    | 2                    | FR 460/10   | TS 56 TSA 56         | 7,1                   |
| M 36                        | 110 | 290                      | 23160 K          | H 3160                    | 2                    | FR 500/10   | TS 60 TSA 60         | 10,2                  |

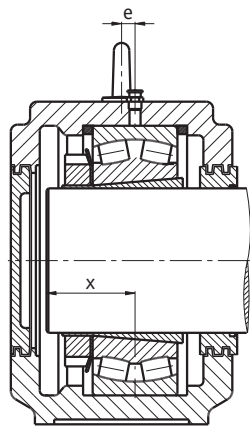
\* fill-up quantity at initial fill (approx. 60% of cavity)

# Plummer Block Housings SD 3100 TS

for bearing with adapter sleeve fastening



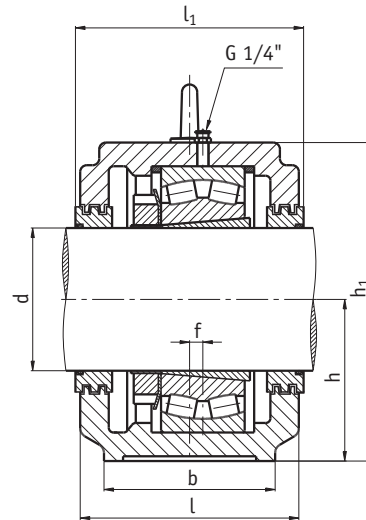
|       |                 | dimensions [mm] |     |     |    |    |     |                |     |                |      |     |    |    |  |
|-------|-----------------|-----------------|-----|-----|----|----|-----|----------------|-----|----------------|------|-----|----|----|--|
| shaft | bearing housing | a               | b   | c   | e  | f  | h   | h <sub>1</sub> | l   | l <sub>1</sub> | m    | n   | u  | v  |  |
| d     | code number     |                 |     |     |    |    |     |                |     |                |      |     |    |    |  |
| 300   | SD 3164 TSAF    | 880             | 330 | 115 | 23 | 23 | 320 | 630            | 370 | -              | 750  | 200 | 43 | 60 |  |
|       | SD 3164 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3164 TSBF    |                 |     |     |    |    |     |                |     | 372            |      |     |    |    |  |
|       | SD 3164 TSBL    |                 |     |     |    |    |     |                |     | 372            |      |     |    |    |  |
| 320   | SD 3168 TSAF    | 950             | 360 | 120 | 24 | 24 | 340 | 675            | 400 | -              | 810  | 220 | 43 | 62 |  |
|       | SD 3168 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3168 TSBF    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
|       | SD 3168 TSBL    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
| 340   | SD 3172 TSAF    | 1000            | 360 | 120 | 30 | 30 | 350 | 695            | 400 | -              | 840  | 220 | 43 | 62 |  |
|       | SD 3172 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3172 TSBF    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
|       | SD 3172 TSBL    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
| 360   | SD 3176 TSAF    | 1040            | 360 | 120 | 30 | 30 | 360 | 715            | 400 | -              | 870  | 220 | 43 | 62 |  |
|       | SD 3176 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3176 TSBF    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
|       | SD 3176 TSBL    |                 |     |     |    |    |     |                |     | 402            |      |     |    |    |  |
| 380   | SD 3180 TSAF    | 1120            | 390 | 125 | 30 | 30 | 380 | 755            | 430 | -              | 950  | 240 | 50 | 70 |  |
|       | SD 3180 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3180 TSBF    |                 |     |     |    |    |     |                |     | 432            |      |     |    |    |  |
|       | SD 3180 TSBL    |                 |     |     |    |    |     |                |     | 432            |      |     |    |    |  |
| 400   | SD 3184 TSAF    | 1170            | 420 | 130 | 35 | 35 | 410 | 810            | 460 | -              | 1000 | 260 | 50 | 70 |  |
|       | SD 3184 TSAL    |                 |     |     |    |    |     |                |     | -              |      |     |    |    |  |
|       | SD 3184 TSBF    |                 |     |     |    |    |     |                |     | 462            |      |     |    |    |  |
|       | SD 3184 TSBL    |                 |     |     |    |    |     |                |     | 462            |      |     |    |    |  |



Locating bearing

Floating bearing

Design A  
Housing for shaft ends



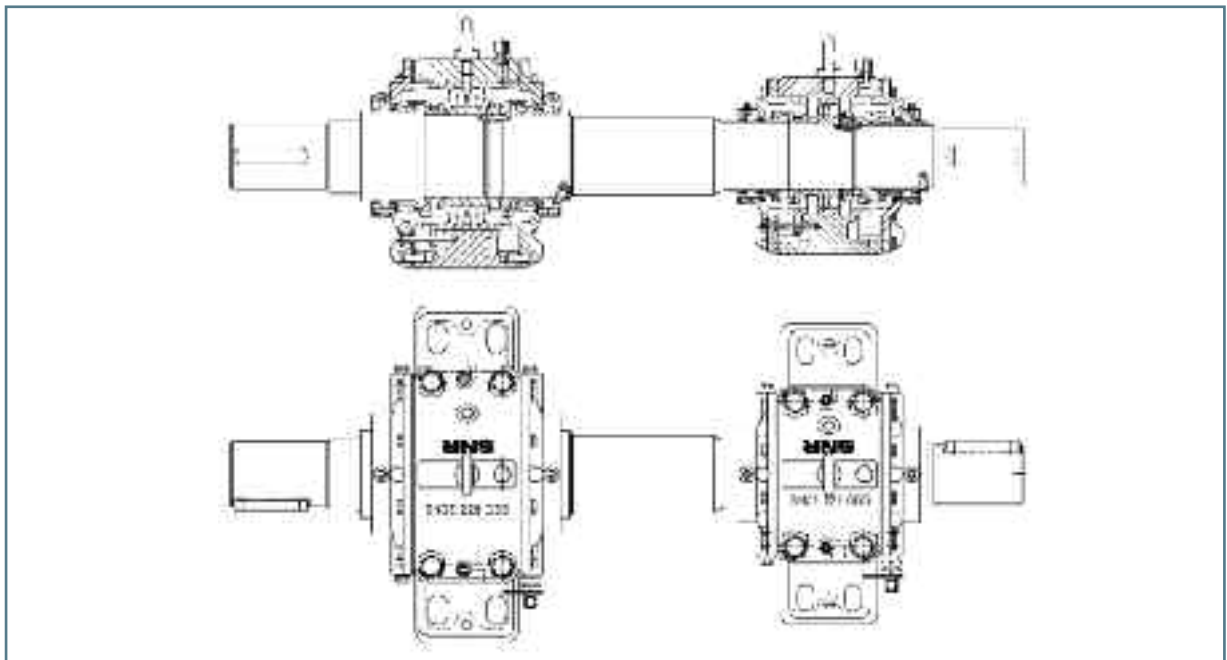
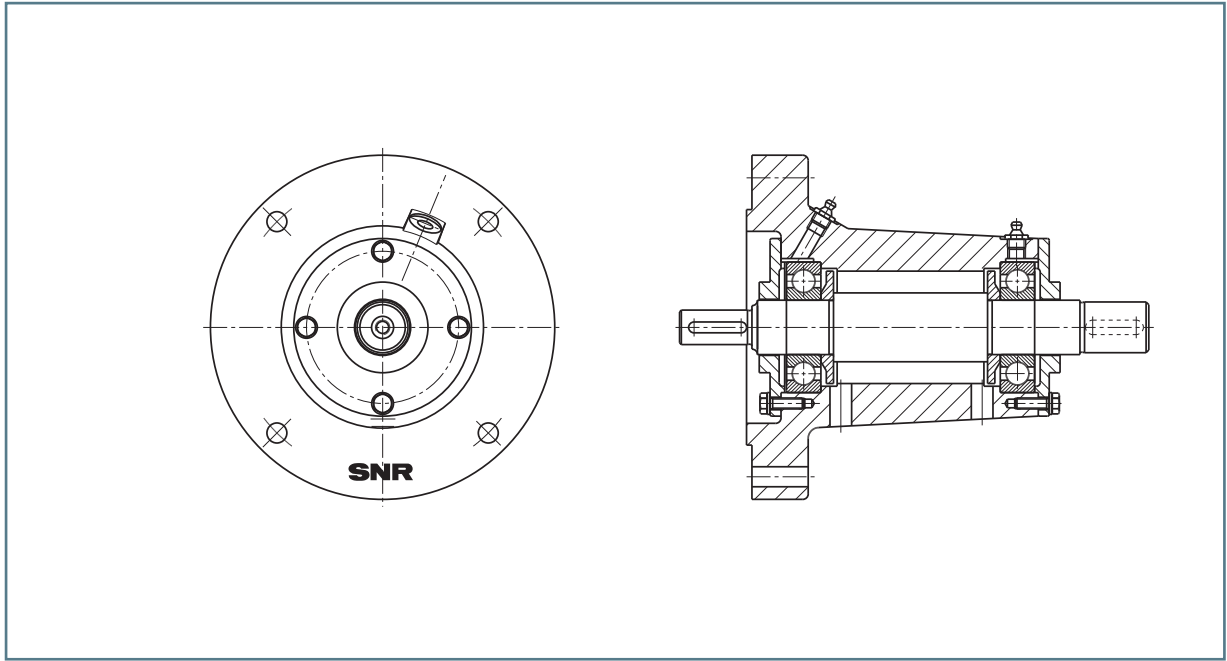
Design B  
Housing for through shafts

| fastening and mounting<br>G | X   | housing weight<br>ca. kg | suitable bearing | bearing housing equipment |                      |             | labyrinth ring | cover  | grease quantity* [kg] |
|-----------------------------|-----|--------------------------|------------------|---------------------------|----------------------|-------------|----------------|--------|-----------------------|
|                             |     |                          |                  | Adapter sleeve            | locating ring number | Code number |                |        |                       |
| M 36                        | 120 | 340                      | 23164 K          | H 3164                    | 2                    | FR 540/10   | TS 64          | TSA 64 | 12,2                  |
| M 36                        | 155 | 380                      | 23168 K          | H 3168                    | 2                    | FR 580/10   | TS 68          | TSA 68 | 18,5                  |
| M 36                        | 160 | 420                      | 23172 K          | H 3172                    | 2                    | FR 600/10   | TS 72          | TSA 72 | 19,0                  |
| M 36                        | 165 | 490                      | 23176 K          | H 3176                    | 2                    | FR 620/10   | TS 76          | TSA 76 | 23,5                  |
| M 42                        | 170 | 570                      | 23180 K          | H 3180                    | 2                    | FR 650/10   | TS 80          | TSA 80 | 24,0                  |
| M 42                        | 190 | 610                      | 23184 K          | H 3184                    | 2                    | FR 700/10   | TS 84          | TSA 84 | 31,0                  |

\* fill-up quantity at initial fill (approx. 60% of cavity)

# Bearing Housings

## Special solutions



As you can see the SNR service not only extends to bearing design, but also on complete bearing units, i.e. completed housings with shafts mounted by us!





## | Auxiliary range

### **Automatic lubricator**

With the introduction of SNR grease bushings bearing faults caused by lack of grease or excess grease are now a thing of the past. A manually adjustable, constant grease volume supply ensures every bearing position operates perfectly for up to twelve months.

The grease bushing is available with all SNR standard greases. It is explosion-proof and can be mounted into any position.

More information about this can be found in the SNR Maintenance Services catalogue.

### **SNR LUB greases**

The SNR Maintenance catalogue provides you with information on the most important technical and physical properties of the SNR standard grease.

It makes it easier for you to select a lubricant for your particular application.

### **SNR induction heating devices**

With these devices the operator can heat bearing inner rings quickly and reliably. The heating process enables easier mounting and increases the service life of the bearings.

Even sealed and greased bearings can be heated with the aid of induction heating devices.

SNR offers different devices for various sizes of bearings.

### **SNR bearings in PREMIER quality**

SNR PREMIER self-aligning roller bearings are designed for applications in which high loads, severe imbalance, dirt, shocks and vibrations can occur. To improve on the excellent performance and reliability of the series, the SNR PREMIER self-aligning roller bearings have been optimised in terms of their load ratings and service life. By using high-purity steels, optimizing the internal construction and improving the manufacturing methods, the load ratings have been successfully increased by 18%, bringing a 75% rise in the service life.

| To find out more about SNR's PREMIER quality self-aligning roller bearings, ask for your catalogue.

### **SNR special bearings / -systems**

Next to our varied standard range we also develop special bearings and bearing systems in close coordination with our customers from every branch of industry. Therefore we use non-standard materials or change housing designs after customer requirements.



# SNR : BEARING HOUSINGS

There is a great variety of bearing housing applications in the field of machine- and plant engineering. In most cases technical requirements and environmental conditions influence the design of the housing, the choice of the bearing and specification of the sealing system. The wide assortment of SNR bearing housings offers always an adequate and efficient solution for the installation in your machinery.

